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The Household Library

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NEW and original treatises on the building, furnishing, and keeping a home; on home etiquette, and the conduct of dinner parties, receptions, weddings, etc.; on food economy and the preparation of both plain and fancy dishes; on the care of the sick, the hygiene of motherhood, the treatment of infants and young children; on the legal rights of women in the various States of the Union, with advice as to business careers, investments, etc.; and on the manly and ladylike conduct of young people during the formative period of character. With many illustrations in half-tone.

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Kansas.



THE BRIDE'S FIRST LUNCHEON

—The Homemaker

THE HOMEMAKER: HER SCIENCE

With a Treatise on Home Etiquette

BY

CARLOTTA NORTON SMITH

Late Editor of "The Art Interchange"

"If I were asked to what the singular prosperity and growing strength of that [American] people ought mainly to be attributed, I should reply—to the superiority of their women."—DE TOCQUEVILLE.

*WITH FRONTISPIECE IN COLOR
BY W. T. SMEDLEY*

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FOREWORD

IN concluding our labors there remains one word more to be said; a word of thanks to those who have made the work easy to us and we hope profitable to our readers.

We acknowledge with pleasure our obligations to Mr. E. C. W. Dietrich for advice and for the privilege of using in this book as illustrations his sketches and plans. We are indebted to him for the sketch, plans, and interior view of the "Stone Cottage"; for the sketches, plans, and interior view of "A Three Thousand Dollar House"; for plans, exterior and interior views of "A Country House"; for design of a "Cowled Fireplace," and for the sketch, plans, and interior views of "The Craftsman House." To Mr. Hobart A. Walker for assistance, and for the use of his sketches, "Suggestions for Styles of Houses," for sketch of "Rustic Cabin" and plans, and for "A Colonial Dining-room with Ingle." To Mr. George Inness, Jr., for courtesy in allowing the use of the photograph of "A Rustic Fireplace for a Mountain Home," designed by Howard Greenley. To W. W. Ellsworth, Esq., for courtesy in permitting the reproduction of the sketches of "A Colonial Fireplace," "Keeping-room, Colonial Style," and "Special Fitments," designed by the late Melvin Hapgood. To Mr. Edward Hapgood for sketch of "Bay-window on Bookcase."

It is to the generosity of Messrs. W. and J. Sloane that we are indebted for the admirable selection of rugs and carpets shown in these pages. To Messrs. Palmer and Embury for the photographs of French and Colonial furniture. To "The Craftsman" for reproductions of Mission furniture.

The kindness of the Kenney Manufacturing Company and of Messrs. Meyer and Sniffen has put it in our power to furnish examples of the latest, most modern, and most hygienic plumbing.

We acknowledge our indebtedness to Messrs. Dempsey and Carroll for permission to use the illustration "Mourning Borders," and for valuable information concerning the latest forms of engraved visiting cards and invitations.

We also desire to thank "The Art Interchange" and John Wanamaker, Esq., for courtesies extended, and to express our gratitude for the invariable consideration which has met our efforts to obtain exact information for this work.

THE HOMEMAKER: HER SCIENCE

PART I.—BUILDING THE HOME

I

THE HOUSE

The Location—Buying a House—Building One's Own House—Choosing the Style of the House—Architect and Builder—The Study of Architecture—The Position of the House—Requisites for the House—Size of the House

THE LOCATION

WHEN we seek for a local habitation for the home it is almost always possible to find a dwelling, either house or apartment, to suit if the search be long enough and some requirements conceded. There are some concessions, however, which should never be made. We must bear in mind that upon the house and its location depend the bodily health of the inmates, while the surroundings exert a powerful influence upon their moral and intellectual health. Bad neighbors are as much to be eschewed as bad drainage, especially when there are children in the family. It is possible for grown people to come and go independent of the inhabitants of the immediate vicinity and seek their companionship elsewhere, but children are limited to the neighborhood close at hand, and immature judgment should be shielded from the wrong sort of youthful impression.

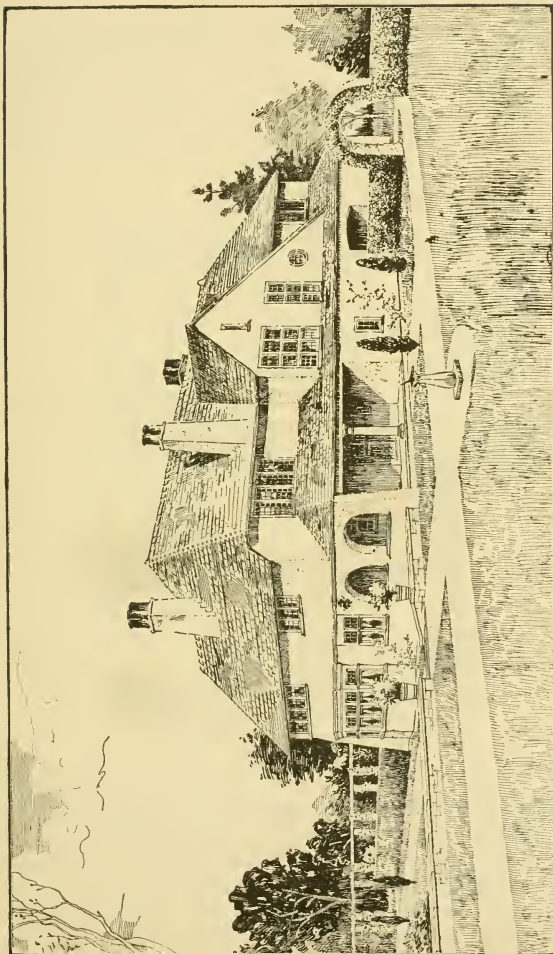
In the question of neighborhood it is not merely the street on which the house faces which is to be considered. In a suburb near New York there is a pretty street on which live charming people, but from which families with growing children move after a short experience of its drawbacks. Just over the brow of the hill, entirely out of sight, lies one of the

worst localities in town. The vicious children who sally forth from it are a constant menace to the moral perceptions of the boys of the better locality, a matter of dread to the girls on their way to and from school. There is also a decided lowering of the tone of the school in that district from the presence of these children.

The school facilities are a very important item in the choice of a house and a matter of much importance in the making of a home. It is a hopeless task to attempt to train children in courteous manners and refinement of thought if the atmosphere about them for the better part of the day is exactly the opposite. It is this fact which leads most men with young families to prefer a small town or suburb for a home, even when their business is in a large city. There is no training like that given in the public schools of this country, but the children of the more refined people are practically barred out of a city school by the associations which they must encounter.

The schools and the greater freedom for the children which the suburban life affords are not its only attractions. There is a charm in one's own house separated from its neighbors by even the merest strip of lawn and sheltering shrubs, a feeling of independence never to be found in a block house or apartment, however handsome it may be.

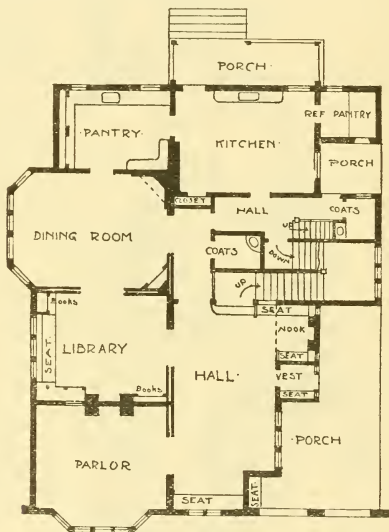
There is also the cheaper rent to be considered. This is not entire gain. The distance from the business centre and the time consumed in reaching it are to be taken into account. Transportation is to be counted in the rent and so is the difference in the cost of provisions. Sometimes these items will balance each other. In the suburbs of large cities, however, they are both on the same side of the ledger. Provisions in many places near New York are much higher than in the city. Curiously enough this is the case especially with summer vegetables and fruit, since few of the suburban dealers draw their supplies from the adjacent country, preferring to purchase in the city markets. In this way produce often returns to the vicinity of the farm on which it was raised with the charges of freight and handling added to its real value.



A Country House

BUYING A HOUSE

There is a certain advantage in buying an old house. Its faults are known, its possibilities in the way of improvement suggest themselves. The price paid, too, is always less than the money one would spend in building. There is very little difference, however, if one indulges in alterations. One thing



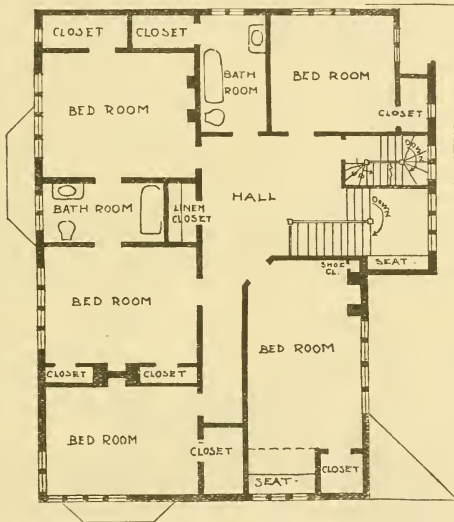
A Country House: Plan of Ground Floor

invariably leads to another and in the end the house is practically rebuilt.

In the matter of new houses one should beware of the ordinary suburban house built as a speculation, to sell, not to live in. In such houses far more attention and a greater proportion of money than are justifiable are devoted to the exterior, at the expense of substantial building, comfort and warmth. They may be endurable in spring and autumn, but

they are always hot in summer, and no reasonable approach to comfort is attainable during the frequent and severe cold spells that mark our winters. A ruinous quantity of coal is burned without raising the thermometer above the barely livable point. Grates and oil stoves but serve to alleviate without removing the trouble.

The fault does not lie entirely with the builder. He adjusts



A Country House: Plan of Second Floor

his wares to the demand. He would make solidly constructed houses as readily as the flimsy constructions of scantling and shingles he does put up if they could be sold as readily. The fault lies with the buyer, who, partly from ignorance and partly from an overestimation of superficial decorations, pays little regard at the time of the purchase to the hidden qualities of a house upon which the practical comforts and conveniences

depend. We are too altruistic in our choice of exteriors and spend more for the pleasure of the passerby than for our own facilities of living and are not always successful at that. Architect and builder strive for variety and novelty and do not in every case achieve beauty. There is an undoubted attraction in novelty. Surprise is in itself a pleasant sensation, the odd and unusual challenge the eye. But unless justified by the needs to which the building is devoted, all outside variety is only tiresome in the end and a useless waste of money.

It may be noted in this connection that a house cheap in the matter of solidity is dear in the end. Four per cent is considered a fair rate of interest; by some it is said to be the only safe rate. Forty dollars, the interest at this rate on a thousand, vanishes in smoke in the winters with which we are frequently favored, in company with many more dollars which tend toward the plumber to pay for frozen and burst pipes and to the doctor called in to attend sufferers from colds and sore throats. It would be quite safe to invest a couple of thousands in better building and count upon saving more than the interest.

BUILDING ONE'S OWN HOUSE

Rather than purchase or rent it may seem wiser to build. This is a proceeding fraught with mingled pleasure and anxiety from the first calculation with paper and pencil to the very last payment on the builder's account.

The first step after the purchase of a site is to make an exact estimate of the amount which can be spent on the house and the preliminary laying out of the house and grounds. Three-eighths of that sum should be set aside and the estimate made on the remainder. The amount set aside will cover alterations of the plan, an almost invariable experience of the novice whose ideas grow as the work proceeds, mistakes of both owner and builder, for which the owner always pays, and for grading, a fairly heavy item, but one which never appears in the architect's schedule. There are some necessities which lie outside of the ordinary expenses, such as chandeliers and gas brackets, and sometimes the furnace and the kitchen range.

CHOOSING THE STYLE OF THE HOUSE

In choosing the style of the house there is a good deal to be said of a general nature. Every house has its limitations from its environment as well as from the needs of the family



A Brick House

and the limit of expense. The material of which the house must be constructed practically decides its style. Brick will not lend itself to the effects possible to shingle-covered wood,

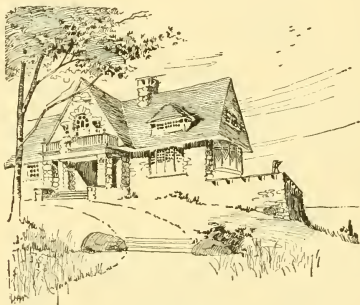


A Shingle-Covered House

and stone is inflexibly severe in the forms it can be made to assume. Each has its own charm, however, as witness the suggestions in styles given in the text. In each case the architect has desired to express in the house the spirit of the material.

What we must strive to secure is simplicity and proportion. Proportion also differs in different circumstances. A house on a city lot may be much higher and narrower in proportion than one with much space around it on account of the idea of extension given by the surrounding buildings. A house on a hilltop should be long and low rather than square and high. So, too, a house on the side of a hill, and in this case the length should run along the hill, not up it. A city house groups with other houses, one in the country becomes the centre of a landscape and must be designed with that idea in mind.

There must be no shams, no architectural indirectness



A Stone House

either in the shape of the house or its material. The exterior should indicate the purpose of a building and its interior arrangement. We may build in artificial stone, for that confesses itself openly for what it is, but we should not by painted parallelograms and lines represent to the public that we have a brick house when it is only wood.

A housefront should not be too flat. Some projections are needed to give light and shade and to obviate a bald effect. One should, however, beware of an exterior too much broken. It may be carried to such an excess as to spoil the rooms within. What is true of the front of a house applies with even more force to the roof. The broken lines and diversified shapes of

the roofs of the old chateaux linger in the minds of architect and patrons alike as a snare. They are beautiful where they have come as a matter of growth and where they have individually been developed as the needs of the occupants have been



A House in the French Style

increased. They have no place in a house built at one time which ought to be homogeneous and complete in plan. There is something painfully absurd also in the effect when dwindled down to the compass of an ordinary purse. It should be



A House in the English Style

understood, too, that next to the cellar the roof for its size is the most expensive part of a house, and every hip and break adds to the expense.

The plan should allow of as few ups and downs as possible. Bleak House sounds most attractive in Esther Sum-

merson's description, but it must not be forgotten that this was a large country house cared for by many servants. The ups and downs so alluring and picturesque when separated by wide space of hall and apartment become unendurable when cramped into the room belonging to an ordinary staircase which must be traversed a hundred times a day by one woman. We have in mind a tiny residence over whose attractive plan visitors invariably exclaimed on entering, whose inhabitants perforce put more energy into going up and down than would have sufficed to run a tread-mill. The staircase had two landings,

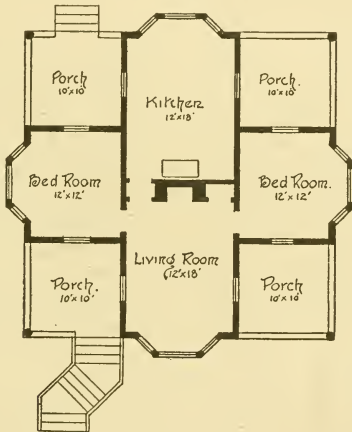


A Rustic Cabin

the second three steps below the level of the upper hall. From this landing two steps up led into the bathroom in the ell. There was a room behind the bathroom which was at the head of the back stairs. Going from the front of the house, one descended the three steps to the landing mentioned, opened a door, went down three steps more, then mounted five to the door of the room. It took three landings to bring the back-stairs from the bedrooms to the level of the kitchen. It is hardly necessary to say that every piece of furniture larger than a chair was raised by ropes and main force through the windows to the second and third stories.

That is the most satisfactory dwelling which combines a simple, well-proportioned exterior with an interior so planned that it possesses both space and elegance, is easily cared for and convenient in its arrangements. There are attractive plans of houses published in the various magazines, with fabulously low estimates of expense. The extremely low price is partly due to the omissions of many interior conveniences and partly to the fact that all materials are supposed to be on the spot.

One should always bear in mind that the transportation of



A Rustic Cabin: Plan

materials adds to the expense in direct ratio to the distance from the business centre and from the railway. When the materials must be hauled over country roads the grade makes the expense even greater. In one case the cost of hauling two miles and a half up a mountain added exactly one-third to the expense of building. Another house five miles from the station, where the grade was even much steeper, even with the lower story built of stone on the place, had a transportation account equal to one-half of the other expenses.

ARCHITECT AND BUILDER

When the style is chosen and the wants roughly blocked out on paper the architect should be called in. A good architect is able to save us from many mistakes in taste and in choice of materials. If in nothing else his percentage is well spent on the specifications. He knows where to use the best quality of material and where to make coarser stuff do the work. If one is building from one's own plans and ordering with the assistance of the carpenter, it is quite possible to be confronted with fine Norway pine ceiling when it is only an under floor which is to be laid.

It is not well to pin one's faith too blindly to architects, however. As a class they are but human and not infallible; they are also men and not always keenly alive to the needs of housekeeping. There are records of architects who have planned houses in which from the arrangement of doors, windows and chimneys there was wall space for no piece of furniture higher than a divan or wider than a grandfather's clock. We have all seen bedrooms in which the bed faced a window or ran past one. Sometimes it has of necessity done both. There have been stairs constructed so steep, with treads so narrow that they perilously resembled ladders; butlers' pantries with shelves so high that the use of a step-ladder was necessary for every dish taken down or put away; cellars with no entrance except through the kitchen; wine closets snugly tucked away behind coal bins; a whole attic floor with nicely finished rooms, not one of which had a means of heating it, and this in a climate which requires artificial heat after the middle of September and up to the first day of June. We have seen closets so narrow that two dresses filled them to overflowing, with shelves so shallow that they seemed better fitted for spool racks than to hold articles of clothing; and steam heaters on the same level as the rooms to be heated regardless of the fact that steam never descends. It is even stated that one architect in the West had his own house well under way before he discovered that he had one room with no window and no door.

It is safe, too, to study the plans. Curious things have been done through mistakes of the copyist. It was a slip of the pencil which gave a very handsome house in the suburbs of New York instead of two windows of the same size next each other, one of the correct dimension and one five inches wider, and another slip that put in a staircase which no grown person could possibly ascend unless he were bent double. It is true that both these mistakes might have been avoided had the builder or the executing carpenter taken the trouble to inquire about the matter. They are supposed to follow the plans, however, and were quite within their technical duty in so doing.

One should also give the architect a little leeway. To place a fixed limit and to insist upon some especially expensive feature is either to drive your architect to plan in proportion to such requirements, calculating on a margin over and above the sum stated, which is a thing an honorable man hardly likes to do, or to skimp somewhere else, always in the wrong place. An architect is hampered by his superior knowledge quite as much as his client by his ignorance. He knows what can be done for the money, but is not always in a position to explain to his employer where the fault for the shortcomings really lies, when he is forced to rob Peter to pay Paul.

One can not have everything one wants, especially in house building. It is taste and discretion which must decide. At the very best any achievement falls short of the vision which prompted it, and remains but a symbol, which may perish while the vision endures. This applies particularly to building. We have the consolation of knowing, however, that the house of our dreams is always ours.

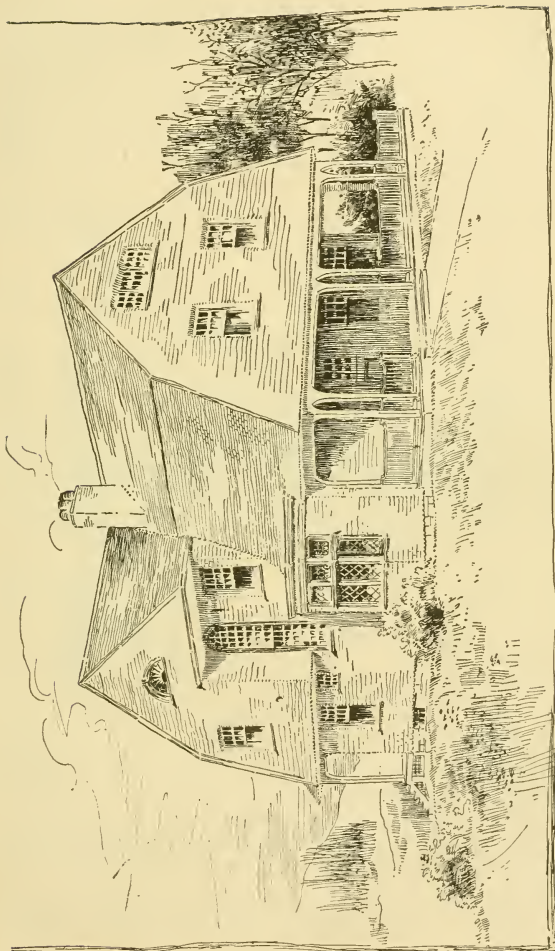
In house building ignorance on the part of the would-be owner is perhaps more deadly than in any other circumstances, since the mistakes are costly and the results lasting. He who would build should inform himself of prices and possibilities. If it is a woman who embarks on this fascinating experience she must make up her mind that unless she has a fair comprehension of details her house will be full of exasperating

reminders of the occasions when against her will and better judgment she has yielded to masculine obstinacy and the assertion of a superior knowledge, whose claims can not be established in her own mind on account of her inexperience. One has but to take the first steps toward the erection of a house to discover what seems a decided disinclination on the part of every carpenter and mechanic to allow a woman to have her own way. This appears strongly marked when there is a masculine element in the family that can be persuaded to take sides with the mechanic. Few women escape from the experience without a lasting sensation of irremediable futility and an attitude of pronounced suspicion as to the good faith of the sterner sex.

If you wish a thing to be done the modern rule is to know how it should be done if it is to be to your liking. It might sometimes happen that the mechanic was in the right if the truth were known. Let the prospective builder learn about building, plumbing, drainage and the like; above all, let him master the vocabulary of the different branches and then give the architect a fair chance.

We have advised the employment of the architect; we also advise a contractor. Much has been said about the dishonesty of this class of men. There have been cases of what, to put the matter mildly, we will call careless omissions on the part of the contractor, which have caused accidents, illnesses and deaths; cracked drain pipes, slipped in out of sight, ventilating shafts of block tin under the piazza, although of proper material above; chimneys with no connection between them and the fireplaces they were supposed to draw from, and a long list of slighted work and substituted material. Still, it is our impression that contractors are much as other men. It is certainly possible to find honest contractors.

The contractor saves the owner, if he be inexperienced, a world of trouble, for unless a man has time for ceaseless watchfulness and sufficient knowledge of the different branches to keep proper check on the workmen he is at the mercy of both ignorance and sloth. Papering and painting should



A Three Thousand Dollar House

always be done by contract unless the mistress of the house deliberately chooses to be driven mad by delays and inconvenience. The builder is responsible not only for the work accomplished, but also for having the materials on the spot when needed. It is his business to see that one part of the work does not overlap another; that plastering is not begun before the necessary carpenter's work in the room is finished and that the painters do not take possession before the plastering is done. The repairing of damages incurred through carelessness in this matter does not fall on the builder, but the owner.

THE STUDY OF ARCHITECTURE

In especial would we advise the prospective owner to give some little time to the study of architecture.

What is the definition of architecture? It is, says a great authority, "the art of building according to principles which are determined not merely by the ends the edifice is to serve, but by considerations of beauty and harmony. Architecture thus necessitates the possession by the builder of gifts of imagination as well as of structural skill, and in all works of architecture so-called these elements must exist and be harmoniously combined."

Not all of us have the talents or the time to design, but we should be sufficiently trained to appreciate what is being done by others and to be able to feel that delight which is ours only when we know a thing is good and why it is good. A very slight knowledge of what constitutes beauty in an edifice, if shared by only a portion of the community, would have spared this country the miracles of bad taste which sprang up as mushrooms in the heat of the first reaction from the packing-box style of dwelling house wellnigh universal in the middle of the last century.

These are things which should always be borne in mind, viz.:

The exterior of an edifice should be harmonious with the inside plan. Lies and deceits are not compatible with good architecture.

Simplicity and proportion constitute beauty without decoration.

Decoration is permissible only when it carries out the main idea of the edifice.

We would advise the study of architecture not alone to the prospective builder. It is the most fascinating study for any one, and unlike many other studies, repays one from the start. It needs but a superficial knowledge to distinguish the main features of the different styles: the well-marked Egyp-



A Three Thousand Dollar House: Rear

tian, the East Indian and Japanese, the Grecian with its allied branches, the Roman, Romanesque, Gothic, Saracenic, and Renaissance. How much more we see then around us! How interesting become the efforts of our great architects who are endeavoring to adapt the recognized form of beauty to the ever-increasing list of modern needs and triumphs of civilization! Every one of the great buildings of to-day stands as the more or less partial solution of this problem.

What is true of styles of architecture is even more true of that part of those styles which has to do with decoration. Unless we are somewhat familiar with details, we find ourselves consenting to styles mingled and confused in such a way that there is only pain for the initiated, and the ignorant have a helpless sense of something wrong which is the acme of discomfort.

Whatever is neglected, one should know something of the Greek and Gothic styles. We see their forms and adaptations from these forms around us every day. The perfecting of the Greek style was an era in architecture. It was the one perfect combination of simplicity and elaborate detail, solidity and grace, proportion and elegance. It was the result of all the efforts of the builders in that lighter and more flexible medium, wood, crystallized into stone to remain as our pattern forever. Its moldings and decorations are so far the culmination of the suitable and the beautiful that they have never been surpassed, and have set the models for all future generations. It is an example of the life which is inherent in an object of beauty. Whatever the vagaries, searches after originality, experiments of our architects, the Greek forms appear again and again in the history of architecture asserting their irresistible power. They are not confined to buildings with fluted columns and carved capitals, but enter into the composition of the door and window molding of very unostentatious dwellings and appear in our furniture.

There are quantities of books on the subject which are not only instructive but interesting reading, full of revelations of the temper and thought of the different epochs in which the well-marked styles came into being. A half-hour at a reference library once in a while would give one new eyes with which to see the every-day world about him. For those pressed for time remains the encyclopædia, with all information condensed into the most comprehensible form and cuts enough to train the eye. It is safe to predict that one who has taken the first step in this delightful branch of study will not pause there.

THE POSITION OF THE HOUSE

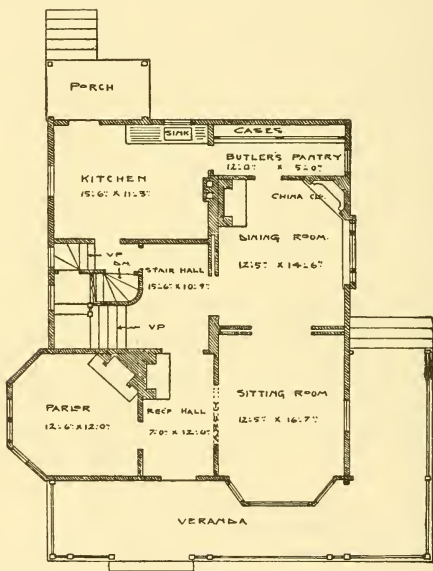
The position of the house in the country or suburb is a thing to consider. It should be so planned as to catch all the sunlight possible for the living rooms of the family and secure as much of the view. When it is merely a summer shelter there is the prevailing breeze also to bear in mind. If it is a winter residence, too, then some care must be used to avoid the fiercest of the winter blasts. Build the summer home on the hilltop, but for the winter home seek the lee of some hill or the shelter of trees. In the city there is not much option with regard to the position of the house or the rooms in the house. Convention and convenience put the most desirable on the street front. This is not the invariable custom, however. In a certain garden city there is a street which happens to run along the top of a ridge, whose inhabitants with one accord put their kitchens on the street side, with no material loss to the public and very much to the advantage of the living rooms, which had the advantage of the view at the back of the house.

And as to planning there is also a note of warning to be uttered. It is possible in altering an old house to adapt what was fitted to the needs of another generation to the demands of to-day and attain quaint and pleasing effects. To deliberately plan such effects is an architectural crime. The result of skill shown in adapting and contriving is to be praised; a contrivance executed for the pleasure of contriving is a horror.

REQUISITES FOR THE HOUSE

There are certain requisites for a good house and they are of relative importance; no one can be done away with, but some can be subordinated to others without material loss. They rank thus: Places to live in—libraries, sitting-rooms, dining-rooms, nurseries; places devoted to cleanliness—bath-rooms; places to work in—kitchens, pantries, laundries, sewing-rooms; places to keep things—closets and storerooms; places to sleep in—bedrooms; places for the outside world—reception-rooms and drawing-rooms. It will be noticed that the outside world comes last in the list, also that the place for thought

comes first. Not every house can be so large as to afford separate apartments for each of these avocations. Combinations are necessary. Some combinations are to be avoided if possible. The nursery and the sewing-room should not be combined, nor should the nursery be a sleeping-room if it is possible to prevent it. The sitting-room and dining-room

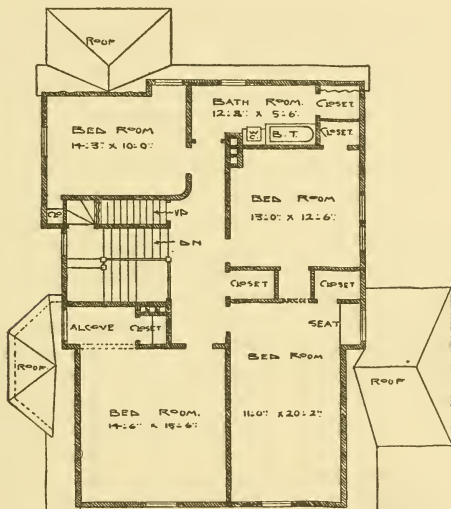


A Three Thousand Dollar House; First Floor Plan

should be large, the kitchen and reception-room small, though for very different reasons—the reception-room because it is foolish to waste on the outside world room which can be better devoted to the family and its intimates, the kitchen because the work is more easily accomplished.

There should be as many bathrooms as it is possible to pro-

vide. One for the domestics, whom with singular inconsistency we require to be neat and to whom, as a rule, we refuse the means of neatness which we demand for ourselves. There should also be a bathroom for the guest. There is no greater misery for one used to a daily bath and conscious of the rapidly approaching breakfast hour than to wait his turn at



A Three Thousand Dollar House: Second Floor Plan

the convenience of the family or to dress without the accustomed refreshment.

As to bedrooms, they should be as large as the space will permit, always providing for but a single occupant in each room. This is true also in the case of those who wait upon us. In fact, much of our domestic discomfort would be eliminated if the elements which constitute the domestic staff had the advantage of privacy and solitude in which to pull themselves

together when off duty. The best-bred person, in whom suppression of self and consideration for others is second nature, feels the relief afforded by solitude, and its necessity increases as experience of self-discipline and practice of self-abnegation in the small things of life decrease.

SIZE OF THE HOUSE

Finally, the house should not be too large. Its size should be in a great measure dependent on the amount of service at the command of the housekeeper. If she can afford a large corps of well-trained servants the limit of size is only the limit of her desires; but if a great part of the work falls on the housekeeper or the immediate family more rooms than are needed or a disproportionate provision for guests is a great mistake. Mere housekeeping is not all there is in the world. There are other things. The problem is to so accomplish the housekeeping that there is time for the other things.

As to the amount of money needed for building a house, of course, there is no limit to what one may spend on it. We have seen, however, very good houses whose whole expense came within three thousand dollars. One of ten rooms and a kitchen had a cellar and woodshed. Two of the rooms were in the attic and the others divided between the first and second floors. The fault of the house was that the space cut out for the porch diminished the size of the rooms on the first floor. This house had a good bathroom and a trustworthy furnace. Another great defect was the arrangement of the rooms on the first floor. A ground plan which would have allowed for a good-sized reception-room, a beautiful large dining-room, and a handsome hall was cut up into many small rooms and the hall diminished to a mere entry.

The example which we give of another three thousand dollar house shows much better planning. (See pp. 23, 25, 28, 29.) In fact, the style of a house and the amount of room in it depend upon the treatment of the hall space. In the city we should devote as little room to the hall as possible. In the country, however, much is gained by making of the hall a

sitting-room and thus permitting more space to be thrown into the dining and living room.

The various sketches of houses and their accompanying plans were selected for their general attractions rather than to illustrate any special style. They are all simple in exterior and therefore pleasing, but their chief claim to attention lies in the arrangement of the interiors. If studied the plans will all show ample provision for closets and a comfortable and commodious arrangement of stairway and hall. They are none of them strictly city houses, though appropriate to "garden towns," where simple dwellings are in place. In the larger cities it is not feasible to build a small and inexpensive house; too much must be spent on the exterior to bring it into touch with its neighbors. A man who desires an inexpensive house must choose a locality where his modest dwelling will not be made to look less than it is through comparison. The cost of the land for one thing will not justify him in building at all if he has not the means to erect an edifice appropriate to the situation. Fortunately the electric railroads make living where land is cheap, though at a distance from the place of business, perfectly practicable. An excellent style is a stone cottage, the exterior view of which appears in plate II. Following the exterior view is an interior view of a hall with timber ceiling in a stone cottage (plate III).

II

THE CELLAR

Need of a Dry Cellar—How to Build a Cellar—The Outer Drain—The Furnace—The Cellar Storeroom—The Coal Cellar

NEED OF A DRY CELLAR

WHEN we plan for the new house we must be prepared to concede to the building account two heavy items of expense: the plumbing and the cellar. Although these are the least showy portions of the structure, it is in just these departments that it is poor economy to be niggardly. Money so saved will surely be spent in other ways. In relation to solidity of building we have advised investing in solid and substantial houses in order to avoid expending in coal and doctor's bills more than the interest of the extra thousands so employed, and to enjoy comfort at the same time. In the matter of cellar and plumbing it is not the interest which would be saved, but the money itself, and more than the money.

Doctor's and undertaker's bills, it may be presumed, are those which we like least to pay. The only way to keep these reduced to their lowest limits and enjoy the blessing of health in addition is to spend a less sum in prevention. The expenses of a couple of cases of severe illness would go far toward paying the difference between good and bad plumbing, between a poorly constructed cellar and a good one. In case of the patient's decease, funeral and mourning expenses and the probably imperative doing over of the room would run far ahead of what the proper outlay in the first place would have been, not to speak of the cost of putting right what has been done wrong. Shutting the stable door after the steed is irretrievably lost is a very unsatisfactory process, and a costly one.

A healthful house must be light, dry, and airy. The one

great and unreplaceable disinfectant is sunshine. But plenty of windows and free currents of pure, sun-warmed air will be ineffectual to do away with the results of damp cellars and sewer products. We must bear in mind that the air from the cellar permeates the whole house, rising behind the plastering, through the floors, and is sucked in and distributed by the furnace.

We are familiar nowadays with the germ theory of disease, and have had more or less personal experience of the results of involuntary germ culture, but perhaps we are not all aware of the direct connection between the growth of dangerous germs and dark, unventilated rooms and moist air. There is an alarming array of statistics, however, reaching back far beyond the era of bacteriology, of whole families exterminated by that dread disease, consumption, once known as the scourge of New England, and in every case the dampness of cellar and house was referred to as a contributing cause. And consumption is only one of the diseases so fostered. It may also be well for those of us who are attached to our worldly goods to remember that not only do human beings suffer in this germ-breeding atmosphere, but that our most valued possessions are at the mercy of the very unpleasant process called by some curious reversal of ideas "dry rot," whose growth is induced by dampness.

It may be laid down as an axiom that one should never build where the soil is damp. It is sometimes impossible to do otherwise, and indeed the character of the soil really makes but little difference in the method of building, since the cellar must be protected from the possibility of streams of surface water in storms and from the water in the ground in the spring as well as from the air in the ground. It is not everything to have a dry soil. Even in a dry soil peril lurks. To many of us the fact that there is air in the ground comes as a surprise. There is air in everything, however, and an astonishing amount of it in what we call the solid earth. Nor are stone, brick, or concrete much protection from such air. They are all more or less porous and pervious to both damp and

air. In the country this ground air is not so harmful, the danger from poisonous gases arising from decaying organic matter being largely under the control of the householder, but in the city what is there not to guard against of sewer air, escaping illuminating gas, and effluvia from arrested sewage in one's own and one's neighbor's defective drains!

HOW TO BUILD THE CELLAR

To make the perfect cellar, on the leveled earth a foundation layer of broken stone is spread. Tile drains with a good grade, at least one line every twenty feet, are imbedded in the broken stone, and an outlet provided. On this is put a deep layer of concrete and a coating of asphalt. No water could rise through such a floor so drained.

On this floor the walls are built, running high enough above the level of the ground to allow of windows eighteen inches high. The sills should be above the level of the earth; the draught is better and there is less danger of water running in during a thaw. The areas in front of windows running below the ground level are extremely difficult to keep free from snow, not to speak of the trouble caused by heavy storms. If we desire a dry cellar, we should not invite the water in. Cellar windows should open inward and upward, and be fastened by a button on the ceiling to secure the most perfect draught possible.

The cellar walls are built of brick or stone, and should have a coating of asphalt on the outside and a damp course—that is, a layer of slate or asphalt—above the ground and under the joists of the floor. It will not do merely to put the cement on the inside of the walls; the outside pressure would force it off. Nor is it safe to lay the concrete and cement floor without underdrains. In some cases the pressure of water is sufficient to lift the cement completely, and leave it in broken blocks.

THE OUTER DRAIN

Outside there should be a drain below the level of the broken stone layer of the floor, and space of two feet or more

filled with small stone. A layer of excelsior is often put over the stones to prevent the earth from sinking among them. This provides for surface water and cuts off the water in the ground from the house, while the broken stone and tile drains under the cellar dispose of what might rise from a water stratum beneath and the asphalt coating excludes the damp air. It is not an uncommon experience for the builder to find that he has placed his house in the course of one of the underground rivers which flow along placidly in their own stratum until the pressure is sufficiently lightened to permit them to rise into what we call a spring—a very good thing in its way but manifestly out of place in a cellar.

There is a fashion much recommended by builders lately of laying outer and transverse walls on a course of rubble (broken stone without cement), with the idea of combining wall and drain. This is a most admirable way to secure damp walls without further care. Capillary attraction will draw the water up into the wall so long as there is any water in the ground. A house against a side hill would, if built in this way, in wet weather have a brook set on edge in its walls rising nearly as high as the water outside.

Where the ground is very wet the basement should if possible have a surrounding area, with cement-coated walls and well drained. In a clay soil the greatest care must be taken to provide drainage for the cellar and the ground about the house, for the soil will dispose of no moisture.

The disposal of the rainfall on the roofs is a very important item in securing dry walls and cellars. The rainfall on the most limited roof space should never be allowed to discharge itself on the ground near the house. We often see small leaders emptying directly on the turf or gravel. Architect and house owner alike observe cheerfully if an overanxious friend remarks upon the fact, "Oh, there is so little water there that the ground will take it up." If we could be sure of only summer showers, perhaps this might be a reasonable supposition, but in this country of ostentatious display even showers are not always moderate, and

when we are favored, as has been sometimes the case, with forty or more days of consecutive rain, it is easy to see that the daily discharge from even so limited an expanse as the roof of the porch is no aid toward keeping the cellar walls dry.

While we are on the subject of dampness it is well to mention that all brick and stone walls which are intended to be covered by lath and plaster should be furred; that is, finished with two-by-four uprights on which the lath is nailed. This gives an air-chamber behind the lathing and prevents any possible dampness from reaching the surface of the room wall. It also makes the house much warmer. One who has not sat near an unfurred outer stone wall will not believe the amount of icy draught possible with doors and windows closed and the furnace doing its best to heat the room.

THE FURNACE

It may be possible that some of us when considering the demands of this perfect cellar on the judgment and on the purse will feel slightly envious of localities where the formation of the ground makes cellars impossible. Yet a cellar in the severe climate of our Northern and Eastern States is a necessity for a house which is to be occupied in winter. It is nearly impossible to heat a house which has no air-chamber beneath it, and absolutely impossible to heat it with a furnace or other central heating apparatus unless the heater is lower than the rooms to be heated. The storage space lost when the cellar is omitted forces the erection of outside sheds for storage of coal and bulky articles, and makes closets and storerooms necessary on the first floor for wines, preserves, and vegetables.

There is always a chance, too, of putting the laundry in the basement if the fall of the ground will permit, where it is out of the way and conveniently near the drying-ground.

Where the ground is so wet as to make a regular cellar impossible, a pit is sometimes dug and lined with cement, and the furnace installed in it. This is the case in New Orleans, whose saturated ground necessitates houses on

stilts. The arrangement is admirable for dry weather, but not infrequently a storm floods pit and furnace, and a dismal amount of pumping is required before the house can be made warm again.

The country home, unless a mere summer camp, should have a cellar and a furnace. The fashion of staying late into the autumn grows on one, and a properly warmed house is a necessity. There is also always a danger of being detained by illness into very cold weather. The open fire is to be considered more as a decoration than a means of heating. If we are to be comfortable there must be heat all over the house, and every room should have its radiator or its register. A small fire in the furnace after one of our New England northeasters will dry the house and raise the spirits of the inhabitants and banish the dreaded summer cold from existence. Where there is a system of plumbing, the furnace is imperative if the house is to be used after the first of November or before the first of May.

CELLAR STOREROOM

In a cellar with a furnace there should be a portion divided from the heater by a partition, of stone or brick if possible, or a tight board partition if the other material is too expensive. This is the place where the swinging shelf and the "safe," screened by wire gauze, are to be found. Here, even in the city, can be put the vinegar barrel. Shelves on the side of the room afford a resting place for the boxes in which the different articles are kept. No furnace-heated cellar is a suitable place for large quantities of perishable food, but there must be a place cool and well ventilated for storing articles between meals which are clearly out of place in the kitchen closet, especially those which have a penetrating odor, such as onions, cabbages, turnips, etc. This is also the place for fruit, both in its natural state and when preserved. All preserves and jellies should be shielded from the light, but while jellies require a very dry atmosphere to prevent mould from forming on them, preserves in glass cans

demand as cool quarters as may be found outside of the icebox.

THE COAL CELLAR

Coal should be kept in that part of the cellar nearest the furnace, for convenience of the furnace tender, but not too near for safety. Here belong nails for hanging the large scoop shovel and for the little one with which the scuttles are filled, and for the hatchet used to chop the kindling. When the house is built a thick piece of floor joist must be saved for a chopping block.

When the cellar must also be used as a storehouse, all articles possible should be hung from the rafters after being carefully tied up in paper to keep dust or probable dust from them. The cellar ceiling should always be plastered. This is necessary both as a precaution against dust and ashes in the other parts of the house and to lessen the fire risk, cutting off as it does the chance of draught between the plastering and the wall.

III

THE KITCHEN

Light and Air—Arrangement of the Kitchen—The Kitchen Closet—The Storeroom—Pots and Pans—List of Kitchen Utensils—The Range and Boiler—The Floor—The Wainscot—Chairs—The Refrigerator—The Servants' Dining-room—The Laundry—The Butler's Pantry

LIGHT AND AIR

A WELL-PLANNED, well-arranged kitchen is the foundation of the comfort of a house. It is the under-thought of worry caused by discontent, complaints, shortcomings in the domestic department which lines the faces of our women when life seems to offer them every material for happiness. In so many cases the root of the trouble lies in the way the house has been planned. One has only to look at apartment houses to discover how little the masculine mind appreciates the needs of domestic service.

It would seem in some cases that to inclose a space in four walls and call it a kitchen is considered to fulfil every requirement. Light, air, cheerfulness, do not come into the question at all. Yet in the city at the intelligence office the employer is invariably asked, "Is the kitchen light? Do you use gas in the daytime?" It is only a maid conscious of her own inferiority who will accept a position in one of these dismal holes. When we consider that except for her afternoon and her Sunday out, all the daylight and many of the evening hours of the cook are spent in the kitchen, one can not wonder that so many of us can secure only inferior service, nor that an atmosphere of discontent arises which pervades the whole house.

At one time it was the basement kitchen which was avoided. These now, with their two large windows and the air space afforded by the yards of the house and its neighbors, appear far more inviting than the gloomy room in the

apartment whose only outlook is a dismal court. Where land is so valuable, and every inch must be utilized, an apartment with all outside rooms is of course an impossibility. The owners do their best by painting the walls of the court white or cream-color to reflect the light and replace the sunshine, and the newer houses have sometimes a kitchen with an outlook. The time will come when hygiene will be so understood that the apartment houses will be shells two rooms deep around a large central space used as a garden.

In the country and small towns there is no excuse for ill-lighted kitchens. Yet in some suburbs the lots are so small and the houses so disproportionately large that only a narrow alley separates the dwellings. Such houses are really less comfortable than the city block house, for they are planned as if they stood alone in a meadow and the middle rooms get from their windows neither light nor air. We have in mind a row of houses in a suburb of Philadelphia so close together that it was necessary to use gas in the dining-room at breakfast-time all the year round. These houses, however, brought good rentals and were always tenanted. What can one expect of the builder when the people who live in the houses cheerfully accept conditions of such discomfort? The remedy lies in the hands of the women, who exercise the right of veto when called upon to submit to circumstances which ought to be bettered.

A kitchen should be light, it should have a cross-draught, it should have the sun at some time of the day, it should not be too large. A small room conveniently arranged is far easier to work in than a large one. When the domestic staff is large it should not be the servants' dining-room. The extra space we used to consider necessary for the dining and sitting room part of the kitchen could be put to better use if separated by a partition from the cooking department. Even in winter the kitchen is not a pleasant place for a number of people to eat in, and in the fierce heat of our American summers it is wellnigh intolerable. No wonder August seldom passes over without quarrels and dissensions below stairs.

ARRANGEMENT OF THE KITCHEN

Sink, range, and tables should be so arranged that the fewest steps possible are needed to prepare the meals. The sink should be near a window, in front of it if possible, and the faucets placed in the wall high above the sink rim. More dishes are nicked and broken by a hasty blow against the faucet than in any other way. The high faucets are a wise precaution when the platters and vegetable dishes from the dining-room come into the kitchen to be washed, as is the case in many houses. The sink should never be against a north wall for fear the pipes may freeze. It is the pipe to the kitchen sink which is most liable to become clogged, and therefore is most likely to freeze.

It is not necessary nowadays to warn the housekeeper against the wooden sink. It was a most unpleasant object in its day, always wet, ill-smelling, and liable to break off in slivers when wiped. Copper sinks are in high favor for their lasting qualities, but they require a great deal of care to keep them looking well. The porcelain sink is the best of all, always looking fresh and clean with the minimum of trouble, but in many cases the expense is a drawback. The iron sink has many good qualities. It is easily kept clean, if not so attractive in appearance as the porcelain, does not leak, and when in use does not rust. There should be room for two dishpans, and there should be a drying shelf raised at one end and scored to allow the drainage from the dishes to run down into the sink. This may be made removable, leaving the table beneath for other uses between times. A high office stool is an excellent thing when there are many dishes to wash or vegetables to cleanse.

The cook needs two tables besides the dining-table, if that is in the room: one covered with zinc on which she does her work, and the other near the dining-room door, on which she sets the dishes ready for the waitress when the meals are being served. In many modern kitchens a marble slab is furnished for the making of pastry. The tables should not be too low. This is the day of large women, and to

work easily one should not be obliged to stoop. It is easier for a small woman to reach up than for a tall one to bend. A very short woman can always use a stool.

There should be ample provision for artificial light, either gas-jets, electric bulbs, or lamps in brackets—one near the sink, one by the range, one by the table. If the kitchen is used as a dining-room there should be a light low enough for reading and working.

No plumbing should be inclosed. In these days of universal water bugs there should be as few places for that pest to lurk as possible. The space under the kitchen sink, especially, should be free to air and the broom.

There is in the modern city kitchen a dresser, built of the wood with which the kitchen is finished. This as a rule occupies one wall of the room. The lower part, about twenty inches or more wide, is fitted with shelves and wooden doors for the storage of pots and kettles. Above are narrower shelves protected by glass for the dishes. These glass doors come down only so far as the lowest shelf, leaving the top of the under compartment full width to be used as a table. There are usually drawers in the lower part for the cutlery, towels, and tablecloths used in the kitchen. This piece of furniture should not be built into the wall, but finished at the back with wood and put on casters so that it may be easily moved for housecleaning.

Too many small drawers are a mistake, so are receptacles for flour, sugar, etc., built into the wall. We remember seeing lately what must have struck the designer as a most admirable and space-saving plan, but which was absolutely impracticable for use. It was a dresser, with scoop-shaped drawers which revolved on pivots instead of pulling out, for flour and sugar. The scoops were zinc lined, but the space behind was not, and once turned up the supplies were open to mice, roaches, or ants at will. Another part of the same piece of furniture was divided into small square drawers, for spices, tea, coffee, all nicely labeled. There could not be a worse mistake. Every article which possesses an odor of its

own should be kept in as nearly air-tight a condition as is feasible, both to preserve its own integrity and to avoid damaging its neighbor. There is nothing better than the japanned tinware or the earthen covered jars sold now for receptacles for such articles. They and the cake and bread box should stand on the dresser.

THE KITCHEN CLOSET

In the kitchen closet are the flour barrel and sugar-box, away from the dust. There should be a round cover with a handle for the flour barrel. This may be made to fit closely by means of a cloth spread over the top of the barrel before the cover is put on. The flour can not be kept too well shielded from dust, insects, and dampness. In this closet, too, are all the canned goods and other stores which should be near the cook's hand. Soap should never be kept in a large quantity in a close place.

THE STOREROOM

In planning a country house the storeroom or grocery closet must be included in the plan. Such a storeroom should have ventilation, and if possible a window to the open air. If not there should be some artificial means of lighting it. When electricity is used there should be a burner in every closet in the house. Gas is perfectly safe in a grocery closet, though not in one used for dresses and other clothing.

POTS AND PANS

Among the kitchen furniture may be included the pots, pans, etc. This is the point where the imagination of the novice fails entirely. She either purchases wildly or meagrely, according to the precise point of fatigue reached when she arrives at that department. Where the kitchen is partly furnished and a new cook is impending, we advise the homemaker to wait for the newcomer. Every individual has a preference for her own selection of tools. Cooks are no exception, though preference seems sometimes too mild a word for the way they put their wishes in the matter.

The following list contains the essentials for beginning housekeeping. It is, of course, subject to variations according to the needs of the family. The requisition for platters, plates, and cups and saucers may well be exchanged when there is a kitchen table to set for a complete set of kitchen china, which gives sugar-bowl, butter-dish, and other necessary pieces. Such sets, prettily decorated, may be bought for from four to five dollars in the large cities, and sometimes for less. Plated teaspoons and forks are also a necessity for a kitchen family. Good table manners are not now confined to the dining-room.

LIST OF KITCHEN UTENSILS

2 dippers	3 baking dishes of enameled ware
2 dish-pans	1 cake box
2 dripping-pans	1 cake turner
1 Dover eggbeater	3 jelly-cake tins
1 egg whisk	1 round cake tin with funnel and upright side
1 iron frying-kettle	1 coffee-pot
1 iron frying-pan	Canisters for holding flour, sugar, meal, tea, and coffee, one for each
2 funnels: one large, one small	1 can opener
6 plated forks	1 cheese grater
1 toasting-fork	1 chopping bowl
1 flour dredge	1 chopping knife
1 flour sieve and measure, combined	1 large colander
1 iron garbage pail	1 small colander
1 gravy strainer	1 cream churn
1 griddle	1 lemon squeezer
6 kitchen knives	1 graduated quart measure
1 small French knife for cutting vegetables	1 graduated half-pint measure
1 apple corer	1 small meat board
6 asbestos mats	1 meat knife
1 biscuit cutter	1 meat fork
1 two-quart double-boiler	2 jelly molds
1 three-quart double-boiler	1 pudding or brown-bread mold
1 bread knife	1 nutmeg grater
1 bread bowl	1 small oilcan
1 large bread board	1 pepper box
1 small bread board	1 ice pick
3 bread tins	1 two-quart pitcher
1 beefsteak broiler	3 small pitchers
1 oyster broiler	6 plates
1 fish broiler	3 pie plates
1 pair butter paddles	1 potato beetle
3 quart bowls of stone china	1 rolling pin
3 yellow mixing bowls, graded sizes	1 salt box

LIST OF KITCHEN UTENSILS (*Continued*)

1 two-quart agate iron saucepan	1 iron spider
1 four-quart agate iron saucepan	1 stone crock
1 one-quart tin saucepan	1 covered stoneware ware
1 set of skewers	2 stoneware possible we rec and
1 split spoon	small
3 tablespoons	1 teapot, stoneware base of clean
1 wooden spoon	6 teacups and saucers
6 plated teaspoons	1 tea kettle (two, if there is no
1 scrubbing brush	water-back)
1 sink brush	1 waffle iron
1 sink shovel	1 wire dishcloth
1 soup strainer	1 vegetable press

THE RANGE AND BOILER

The stove or range itself should be large enough to do the cooking demanded by the family, but not so large as to consume an undue amount of fuel. In apartment houses where the hot water comes from the central house boiler, the gas range is to be recommended for neatness and economy in time, muscle, and fuel. The consumer is also saved all anxiety as to the janitor's honesty, whatever may be his suspicions of the gas company. In city houses depending upon the water-back for hot water, the gas range is possible, but not practicable unless there is a separate arrangement for heating the water needed for the family use. The same thing is true of the gas range supplied from a gasoline plant in the country. If such a heating apparatus could be installed in the cellar out of the way, the gas range would be a boon to all concerned in summer, since the fire is extinguishable when the range is not in use. On the other hand, in the city kitchen to make the gas range profitable there should be some other way of warming the room, otherwise an undue amount of gas will be consumed for warmth.

It is a mistake to put in a too small boiler when the family supply of hot water depends upon it. Both dealer and architect are apt to err in recommending one too small. In theory the idea that more water will pass through the water-back when the supply in the boiler is in constant demand appeals to one. In practice, however, it is impossible to get any adequate supply of hot water from a small boiler,

for the cold water coming into a small receptacle chills what is there before one has drawn half what one likes for a tub. The amount of water held by the water-back is less than, and cupst. at a time, and when the quantity which here is a kitch in it was exhausted, ever so small a stream rush, which gth would not rise appreciably in temperature. Such a boiler is the despair of the laundress, who, between the sink service and the family baths, never has enough for her tubs, and generally takes to heating what she needs on the laundry stove, a real extravagance in fuel and energy!

There should be a narrow shelf near the kitchen stove or range on which the pepper-box and dredger stand, and the earthenware salt-box should hang near. There should be a hook for the poker, one for the lid-lifter, one for the cloth-holder for lifting kettles from the fire, a couple of hooks for the asbestos mats, a rod for the coarse towel which shields the cook's hands in pulling pans from the oven. A little forethought in such matters in building and in arranging saves thousands of steps to homemaker or help in the course of the day.

THE FLOOR

It is customary to put a hardwood floor in the kitchen. It is certainly the best in the matter of wear. Our experience, however, leads us to think that this is the one of the few rooms in the house where a floor covering is advisable for the good of the occupants. When a woman is on her feet all day a hardwood floor is very tiring from the constant jar on the spine. Soft wood covered with linoleum is far better for her and quite as cleanly. Carpets should never be allowed, nor woolen rugs, but perforated rubber mats at sink and in front of the range are excellent. All who are engaged in domestic service and women doing their own work should wear rubber heels. The spine is thus saved the most of the jar, and the step is made appreciably lighter.

THE WAINSCOT

It is customary to wainscot the kitchen and paint the ceiling and the remainder of the wall surface, so that it can be easily cleaned. When the expense is possible we recommend tiling walls and ceiling, both for the ease of cleansing and the decorative possibilities. A wainscot of tiling and the balance covered with glazed paper which can be washed is also good. When the wall is not wainscoted there must be a chair rail.

CHAIRS

In every kitchen there should be a chair with short rockers. The rest afforded by the change in position when preparing food made possible by the rockers is incalculable. It can not be sufficiently impressed upon the housekeeper's mind that everything done to save the strength of herself and her maids, and to make work easy, is directly to her advantage. Good-will counts for much in the domestic problem. The letter of the law falls far short of comfort. How can we expect to have our work thoroughly and cheerfully done by those we employ if we do not do our part to make *their* work possible? We must save their strength if we would use it for our benefit.

THE REFRIGERATOR

The refrigerator should not be in the kitchen, but where the temperature is as low as possible and the currents of air as free. It should not be on a piazza where the sun falls on it. Many modern houses have the back porch semi-inclosed, and put the refrigerator and safe there as long as the season allows. The refrigerator should never be in the cellar, if it is to be properly cared for. The cellar stairs become a good deal of a bugbear toward the end of the day's work. Wherever it is, there must be a way to fill it with ice without carrying the ice through the kitchen. It needs the disposition of a saint to wipe up the dripping and splashing day after day without being ruffled.

When the funds allow it, a refrigerator-room is an ad-

mirable thing. This is tiled throughout and provided with a trapped drain in the floor. There is a door to the open air for putting in the ice, a cold storage closet with its private complement of ice, in which meat may be hung, a compartment for fruit, and a porcelain-lined receptacle for milk and butter.

THE SERVANTS' DINING-ROOM

The servants' dining-room should be next the kitchen and on the side of the room which holds the dresser and the sink, to save steps in setting the table. This is the evening sitting-room of the maids, and the table needs a pretty cover. There should be a book-shelf on the wall. The maid who reads has resource and mental diversion which keep human kind better natured. A cabinet is useful here, too, to hold the salt-cellar and peppers. This is the place for the hard-wood floor, but the chairs must have rubber tips on the legs. A couple of rocking-chairs are part of the necessary furniture. The light should be low enough for reading or working.

THE LAUNDRY

In the laundry should be three tubs, an ironing table, a stove for the boiler and the irons. A chair back is not the proper support for the skirt board. There should be a light horse just the height of the table. If there are two horses the ironing table is free for another worker. When there is more than one servant in a house a laundry is a very wise provision even when the family washing is put out. There can be more ill-feeling produced over irons and wash boiler on the range than in any other way. To have the space for cooking limited when a meal is in preparation is more than the average cook can stand, while to wait for cold irons to reheat is extremely trying to the sufferer who desires to get to other work as soon as possible.

THE BUTLER'S PANTRY

The butler's pantry must be between the kitchen and the dining-room and open into each by means of a swing door. It

is a mistake to have a door with a handle for either opening. Countless torn dresses and aprons and untold consequent exasperation have resulted from the too self-assertive handle of the dining-room door. These doors must not be opposite each other or the aroma of the dinner will pervade the house. There may be a small opening with a sliding shutter from kitchen to pantry if desired, through which the cook passes the filled platters and dishes. In many establishments, however, the waitress is expected to bring all dishes from the kitchen to the dining-room herself, the cook's responsibility ceasing when the food is dished. The conversation between cook and waitress is then inaudible to those at the table and the unpleasant draught from the kitchen through the slide obviated. We have seen a round revolving table instead of a shelf. The dishes were placed on this, the slide withdrawn, the table revolved and the slide closed. This arrangement is admirable when there is but one maid employed and saves her an endless amount of steps and energy.

In the butler's pantry the sink is in front of a window and the faucets are tall and curved over the sink. This is small, oblong, of either porcelain or copper, or it is nickel-plated. It is used as a dish-pan and is protected by the projection of the drying board on one side, the shelf on the other and a narrow wooden rim in front, to save the china from nicks against the metal surface. One wall of the butler's pantry is lined with shelves behind glass doors and deep drawers and cupboards arranged like the kitchen dresser. On the other side, if there is width enough to permit, there may be narrow shelves for cups and glasses. There should be a row of hooks for the aprons and towels, and if there is no housemaid's closet on this floor here is where the broom, the whisk and hair brushes hang as well as the dust-pan and dusters. Here is also the place for the small step-ladder ready to the maid's hand for the upper shelves. The very clever contrivance which combines a chair and step-ladder is the most suitable for these narrow quarters.

IV

BEDROOMS AND CLOSETS

The Sleeping-room—The Dress Storeroom—The Linen Closet—The Coat Closet—The Housemaid's Closet—The Medicine Closet—The Lavatory

THE SLEEPING-ROOM

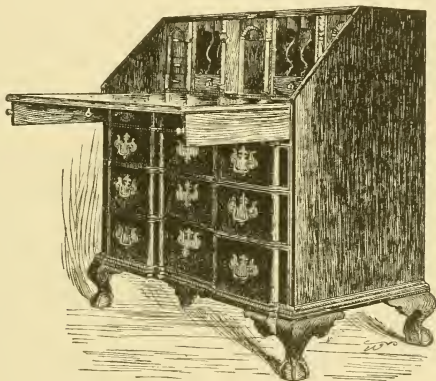
THE bedroom serves two purposes. It is a place in which to sleep and dress; it is also a refuge for its possessor from the world in general and from the other members of the family in particular. To serve these two ends it should be of such a size as consideration for the demands of the family as to number and the dimensions of the house permit. In a small house with many inmates privacy should still be secured, even if at the expense of size. Better cells than dormitories.

A bedroom should so be planned with reference to doors and windows that the bed is not in full view from the door, nor the sleeper's eyes exposed to the direct light of a window. There should be a cross light for the dressing mirror so that its owner may see both sides of the face, and the washstand should not be near a window. A writing-table or desk of some kind is a necessity in a bedroom. If there is one avocation which calls loudly for privacy it is letter writing. A cell can not, of course, afford room for a couch, but when the size allows of one it should be included in the furniture planned for. This piece of furniture ought to be near a window with a good light for reading. A few minutes' level rest, with a glance into a magazine or the daily paper, is the best preparation for picking up the burden of cares again with ease and cheerfulness.

Every bedroom must have a dress closet of good dimensions if life is to be tolerable. It should be nearer square than oblong, and be furnished with hooks along the walls and under high shelves. These shelves need not be put out of reach, however, as we have seen them. The dress when hung up should clear the floor by four or five inches. Even in these

days of very tall women dress skirts are rarely over forty-seven inches long and the ordinary train is only from eight to ten inches longer than the walking skirt. If there is a row of hooks on one side from seven to seven and a half feet from the floor for long trains, wrappers, etc., the wide shelf for dress boxes need be only five feet above the floor to accommodate the walking skirts of the tallest of us.

It is better to have two or more shelves for hats, shirt waists, etc., than to count upon utilizing the floor space.



A Colonial Desk

For shoes, a shelf not more than a foot wide, just on the level of the eyes, is the greatest convenience imaginable. This need be no more than six inches below the shelf above to give ample room for the shoes and their trees. Where the closet is small a length of gas pipe swung under the shelf, covered with Canton flannel, from which the coat hangers can depend, is absolutely necessary if dresses are not to look dowdy and tumbled. The garments then hang flat against each other and the capacity of the closet is about doubled without injury to the clothes.

A closet for the exclusive use of a man, in addition to the shoe shelf and space for the trouser stretchers, which are imperative, is the better for wide shelves upon which coats and vests can lie flat when not in use.

There should be means of ventilation for every closet. This is especially the case when we must hang in one clothing in frequent wear. There is besides no greater enemy to the moth than light and air. A small window into the hall will permit a daily change of air. But while a closet must have ventilation it should also be so constructed that it can exclude dust. A shelf with hooks and a curtain is a poor substitute for a closet, though in a rented house we are often very glad to be able to contrive even that. A closet without a door and deliberately planned to have only a curtain is a positive sin. A dust catcher is not a wardrobe in the real sense of the word.

When building the house we should always bear in mind that each part of it should be fully finished and all the small conveniences put in, for it is the poorest economy to do the thing in an incomplete and slatternly manner. This is more true of closets than of any other department of the construction. It is the training of the architect so to design the interior of a house as to allow for ample closet space and leave no awkward corners and yet not diminish the room perceptibly. Afterthoughts can not be put in after the lath and plaster are in place without marring the effect. Makeshift closets of ceiled wood offer too many cracks for insects to convert into breeding places. Besides a makeshift is bad enough in any case, and when one is obliged to put up with it in the consciousness that the real thing could have been had if only pains enough had been taken to secure it, it becomes a very thorn in the flesh.

THE DRESS STOREROOM

A storeroom devoted to dresses is an admirable thing when it can be managed. This should have a window and be provided with drawers sixty inches long, thirty inches wide and not more than twelve inches deep. These should be on rollers. In them evening dresses and garments not in use can lie flat

and at full length, and be protected from dust and the danger of creasing and stringing. The drawers should not be made too deep, for it is inexpedient to crush one garment with the weight of another. This chest of drawers must be finished at the back and at the bottom, as a precaution against mice and moths. If it is made of cedar so much the better.

There should be shelves wide enough to hold cloak boxes and below them hooks for garments in occasional wear. These garments should be protected from dust in the city by a curtain. Small curtain rings sewed upon the upper hem of the curtain will allow it to hang from the hooks themselves and shield the garments better than if depending from a rod. This is in many ways better than the dress bags made of two widths of muslin. There is less danger of musing, and more air.

THE LINEN CLOSET

Perhaps the most valuable to the homemaker of all these places for keeping things is the linen closet. It is never a good plan to keep the household linen in drawers. The labor of pulling out the heavy receptacles is not inconsiderable, and there is added the liability of crumpling the articles when taking them out or replacing them. Then the greater ease with which one keeps tally on one's goods when spread on shelves opposite the eye is an item of some importance. There should be shelves to within three feet of the floor and the remaining space filled with two drawers for extra pillows, papers and other objects which are necessary but not ornamental. Like every other room in the house, it should have an opening to the outside air if possible. The old-fashioned housekeeper, however, always planned to have the linen closet against the kitchen chimney, claiming that all danger of damp sheets was thus avoided. We might follow the example when sunshine is denied us.

THE COAT CLOSET

A coat closet is a necessity in either city or country. There should be ample allowance of hooks and a shelf for hats and hat boxes. If a shelf for rubbers divided into compartments could

be added the anxious mother would be spared some harassing of spirit in the interval between breakfast and school time. In these closets are kept the tennis rackets, golf sticks, balls, etc. It should therefore be spacious. If there could be a couple of heavy harness hooks for the piazza hammocks the responsibility of the homemaker would be diminished and the tidiness of the hall much increased in rainy weather.

THE HOUSEMAID'S CLOSET

On every other floor there should be a housemaid's closet. This is a shallow closet only deep enough to hold the pails and carpet sweeper, with hooks for the different brooms and duster, one for each, and a shelf for the bottles of ammonia, polish and other necessary but unornamental articles. It may also have a porcelain sink and hot and cold water faucets above the sink.

THE MEDICINE CLOSET

Somewhere in the new house there should be a medicine closet. It is better on the second floor near the homemaker's bedroom in easy reach for hurried calls at night. The width between the studs is sufficient and their depth gives shelves quite wide enough for one row of bottles. It should be so high up on the wall that it will be quite out of the way of small, prying fingers. The narrow shelf is an advantage, since the labels on the bottles can be seen at a glance on opening the door. There is space gained by ceiling the interior rather than plastering it. The wood can be oiled or painted according to the style of the room into which it opens.

THE LAVATORY

Where space will allow there should be a lavatory on the ground floor, with basin and toilet, every other floor having its bathroom or bathrooms. In the lavatory and bathrooms the floor is often tiled and laid with a depression toward the side of the plumbing. A small pipe trapped under the floor, as in the refrigerator-room, leads from the lowest point to the vent pipe and carries off all water accidentally spilled or caused

by leaks from defective plumbing. By far the most hygienic way is to tile the wall also. Sometimes the tiles form only a wainscot and the wall is covered above with glazed waterproof paper. When the expense is to be considered the floor is of hardwood as well as the wainscot. The wainscot is a rather necessary precaution against splashes and defaced walls. (See also VII, "Sanitation and Ventilation," and VIII, "Sanitation of a Country House.")

V

FIREPLACES AND CHIMNEYS

Various Kinds of Fireplaces—The Grate—The Hearth—Flues—Precautions against Fire
—The Inventory

VARIOUS KINDS OF FIREPLACES

THE country house, and the city house, too, when possible should possess an open fireplace, if only for the decorative effect of the fire. It should be in the room which is the favorite gathering place. Many houses have one in the large entrance hall, which serves as sitting-room as well. These fireplaces may be constructed of stone, a usual thing in our mountain resorts, or of brick or tiles.

The stone fireplace is built without a mantel, the stone being carried up to the ceiling in some cases or replaced above the fireplace by glazed brick or tiles. The mantel should not be too prominent in any case. It is merely the survival of the old hood which was often imperative to make the chimney draw. Nowadays it fulfils only the mission of holding ornamental objects and of breaking the space above the opening.

There is but one absolute necessity in a fireplace; it must draw. How to make it do so seems almost an occult art, each separate fireplace being an experiment, and circumstances varying so much in each case as to make rules impossible. It is not wise, however, to have large openings on the same side of the room. No chimney draught is strong enough to contend successfully with the currents of air which draw through them. Corner fireplaces are pretty, but there can be no open door on either side of the room in that case.

We give in the accompanying cut an example of a fireplace in a corner, which is protected by a hood. This aids materially in increasing the draught and makes possible an open fire where the conditions would otherwise be unfavorable. The

fireplace in question is in a corner of a hall with a staircase going up beside it. This would naturally prevent all draught. But by means of this hood the draught is made sufficient to carry the smoke up the chimney. Many architects add these hoods to every open fireplace intended for burning wood. They should not be needed, however, if the flue is properly designed and no unnecessary risks run, like leaving a large opening beside the fireplace.

A fireplace should be wider than it is high, the back should slope forward and the flue should not be in the corner. It should be fairly deep. It should be remembered that while it is always possible to have a small fire in a large fireplace, it is impossible to burn wood of any size in a small one. The English chimneys are so deep that the phrase to put a thing "behind the fire," always curious in sound to an American ear, is but a literal expression of the act. The offending article is put behind the fire, and the fumes, if unpleasant, go up the chimney.

A fireplace which will hold wood four feet long and a really respectable back log is the best size of all. The back log is a great economizer of fuel. It consumes slowly and keeps a small fire along until there is need of a blaze. Small fireplaces devour wood because there is no chance for producing heat by slow consumption and there must be a continual blaze or a succession of new fires all day long. When one lives in a wooded region the open fire is not so extravagant. There are quantities of slabs sold every year for very little, being the refuse from the sawmill, the outside of the logs, half bark, and of no good for anything but fuel.

We give examples of different styles of fireplaces. That designed by the late Melvin Hapgood is a model of its kind. It is simple and admirably proportioned both in its own measurements and in regard to the size and shape of the room for which it was designed. The moldings and ornamentation are copied from the Greek forms, in keeping with the semi-Colonial style of the room. (See Plate IV.)

The rustic fireplace by Howard Greenley is intended for a

summer mountain home. The stonework shows no trace of the chisel, the weathered boulders, stained with rain and covered with moss, being left as picked up in the neighboring pastures. The medallion is a terra-cotta bas-relief of Lucca Della Robbia's Madonna, set in cream-colored glazed bricks. (See Plate V.)

THE GRATE

We have hitherto considered the possibilities of the wood fire only. There is a great deal of cheer in soft and hard coal fires, and decorative possibilities exist in the gas log in its various phases. The last is a real fire and does its duty as a means of heat and ventilation quite as well as the other forms of fuel consumption. We must protest against the Colonel Sellers invention as applied to the fireplace, however. The glass top simulating coal in various stages of consumption lighted by a single burner beneath is neither satisfactory as a deception nor pleasing as a conceit. It is quite the reverse, it is repulsive.

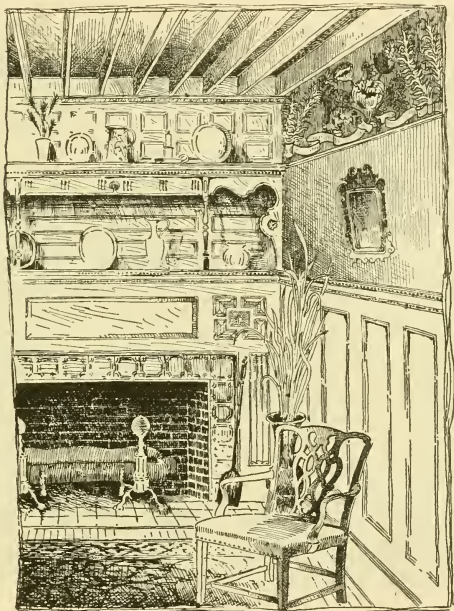
THE HEARTH

Floor timbers should be trimmed for hearths, never carried under them. There have been many fires caused by the slow charring of the timber under the hearth which burst into a blaze when the combustion reached a current of air. The floor timbers should be framed into a header, which runs in front of the hearth and is supported by the timbers on each side. If the hearth is a long one, crossing more than three floor beams, it must be supported from the long timbers by "stirrup irons." If mortised into them, they would be weakened at the point of intersection and cracking and settling would ensue, endangering the hearth and possibly causing fire.

FLUES

The chimneys should be smooth inside. They are best if finished with terra-cotta lining flues. If not, the mortar must not be left in ridges to catch the soot, retaining it as fuel for any chance spark to ignite. Flues must be as straight as pos-

sible; bends and elbows are extremely dangerous. These bends and elbows may not interfere with the draught—sometimes they seem actually to increase it—but they afford harborage for any quantity of soot. From a chimney recently



A Mantel with Ornaments

altered there was taken from the bend near the top a core of soot as large as a peach basket. The owner said it "had always been liable to take fire."

Pegs in chimneys for the support of carpentry are dangerous. One never knows when the flames will find their way to the end of the peg through crevice or crack.

PRECAUTIONS AGAINST FIRE

It is difficult enough to subdue a fire in the city, where we have all the appliances which modern life can afford for the purpose and a corps of trained men to fight the flames. The isolated country house is doomed if fire gains the slightest headway.

There are some precautions which should be taken in the building of every house, city or country. Statistics show that barring the unfortunate combination of the cook and the kerosene can, ninety per cent of the fires start in the cellar, owing to the accumulation of combustible material which collects there. The fires could easily be extinguished, as a rule, where they start if the house were properly built.

An ordinary dwelling-house consists of an outer shell of stone, brick or wood, and an inner lining of lath and plaster or wooden ceiling, connected by the sills and studs. If carelessly built there is a perfect circulation of air from the cellar through the space between outer and inner shells. The sills are laid on the foundation. From them rise the studs, with the floor beams between. The floor projects, as a rule, but a short distance beyond the lath and plaster, leaving hundreds of veritable little flues to carry up what the cellar can offer of dust, damp air or flames to the rooms above.

Of course, dust, dampness, and ground air are to be guarded against, but the action of fire most of all. There should be no chance of communication from the cellar to the air space between the studs. The ceiling of the cellar should be lathed and plastered, metallic lathing being used. The floor should also be defended by a layer of asbestos, felt or other fireproof material between its two thicknesses of wood. The space on the sills between the floor beams and the studs should be filled flush with the floor level with bricks laid in mortar or mortar mixed with plaster of Paris, thus closing all vertical and lateral air space in the walls and the floor from the cellar.

A wooden house well defended from fire risks is really less combustible than a stone or brick house not so defended. It is the shutting off the draught which is the main thing. In our

own experience we have found a wooden house practically incombustible, although ignited through the agency of a defective flue, because circulation of air between the studs had been rendered impossible by shavings which had been rammed down between to make the house warmer.

It is well to take the danger of fire into consideration when weighing the question of expense in deciding the matter of an



A Corner Fireplace with Hood

elevated tank and a pumping apparatus. To fight the fire there should be special provision of water. Where there is water from a higher source laid on in different parts of the house there should be faucets with a coil of hose attached for use only in case of fire. In large country places fire hydrants not more than two hundred feet apart should be erected and hose of sufficient length provided. Fire drill once or twice of a season

is not a bad thing. It must be remembered that while rubber hose may be coiled wet, canvas hose must be carefully dried between each time of using or it will rot.

No country or city house should be unsupplied with the small fire bombs. These must be hung in such a prominent position that even the temporary guest will know where to find them in case of need. A minute gained may make the difference of a house or no house.

One thing more! No country house should be without a generous supply of salt, particularly after the cool weather sets in. This, if applied in time to a burning chimney, will extinguish the flames at once.

One precaution against fire is not common, but is much to be admired. There are some things which invalidate the insurance policy. Filling lamps after nightfall is one of them. The different clauses of the policy bearing on preventable risks should be typewritten in several copies, these framed and hung in conspicuous positions in the house. One should go in the barn, one in the stable, one in the kitchen, and one in the place where the lamps are filled. Our worst sins are surely those of ignorance when it comes to fire and its causes. The following is an example in use on one country place near New York. Every insurance policy should be read for special clauses which belong in such a notice :

RULES IN REGARD TO FIRE RISKS AT ——— FARM

"Kerosene stoves are permitted to be used, but they must be filled by daylight only.

"The kerosene engine may be used provided that kerosene oil of not less than the legal test shall be used as fuel therefor and that the oil tank attached shall not be refilled nor replenished when the engine is in operation nor when the fuel taper is burning; and, further, that a metal pan shall be placed under the entire engine, so arranged as to prevent any dripping of oil from reaching the floor; and the assured in accepting this permit and in consideration thereof warrants and agrees that the conditions thereof shall be complied with and observed.

"Ordinary alterations and repairs may be made, but permission must be obtained for unusual alterations and repairs; and it is understood that no paint or similar substance shall be removed by burning from any of the buildings.

"No uncovered lights shall be taken at any time into any barn; only lanterns are to be used. There must be no smoking in any part of the barn.

"No kerosene lamps shall be filled after dark or near a fire at any time."

THE INVENTORY

It is superfluous to recommend the owner of property to take out an insurance on the same. That is a matter of course. Not so much a matter of course is another useful thing in connection with the insurance—the inventory. Every article in the house should be inventoried and a copy of the list laid away with the insurance policy in the safety deposit vault. This list carries great weight with it in case of fire. One's goods are insured on the value the owner places on them, as substantiated by a cursory survey made by the inspector sent by the company. When a fire occurs, however, it is the contention of the company that the loss is not that of the full policy. Without a list one is often in doubt one's self as to the exact value of the consumed articles.

The inventory is a part of housekeeping also, imperative in case of a rented house.

VI

WOODWORK

Wood Finish—Floors—Doors—Stairs—Windows—Screens—The Piazza—Special Fitments

WOOD FINISH

IT was between thirty and forty years ago that the community awoke to the beauty of the natural grain of wood in finishing a house. The denunciations against paint as artificial and false were many and loud and rather untempered.

It was not until there had been some experience of the inflexibility of natural wood finish when it came to color combinations, and of the horrors in the way of clumsy moldings turned out by machinery, that the pendulum swung back to painted woodwork. It was discovered, too, that in a small house the woodwork must be the same throughout or the effect was patchy. If it were the natural color of the wood, or even if modified by a stain, there was but one scheme of color which could be used in kitchen and parlor alike or in hall and bedroom. Experience taught that wood had certain properties. Each kind undergoes a change of color with time peculiar to itself, and independent of the action of fillers and stains, and asserting itself in spite of them. The beautiful pale woodwork of ten years ago is a deep mahogany brown to-day, and all light schemes of color inappropriate.

A uniform tone of ivory is best. Then the whole house is tied together with a neutral tint and there is a wide range of color practicable. A very large house would give greater latitude, but except in rooms whose furniture is to correspond in the matter of wood, natural finish is not to be recommended. In the kitchen and service department, on the contrary, it is very much to be preferred. There is no special scheme of color to interfere with and it is more easily taken care of than a painted surface.

It is not unusual to see the doors of special wood varnished and polished when the casings are white and the window frame and mullions stained and varnished. This is on the same principle which allows a hardwood floor, filled and polished, in a room with painted woodwork.

The woodwork should be light and graceful. Narrow and fine moldings are in better taste than very heavy ones. There should always be a quarter-round molding at the foot of the skirting board. Where economy is desired, the skirting board is flush with the plastering and the edge covered by a half-round molding.

FLOORS

Floors must be of two thicknesses of boards, the first one put down early in the building for the convenience of the carpenters. The other should be of selected wood laid as late as possible. It should be protected by building paper until the heavy boots are out of the way and the painters' pots with them. Floors should be well supported by beams and these be braced together, making a stiff floor. The disagreeable shaking of flimsy houses is not due entirely to weakness in the uprights. It is more apt to result from insufficient bracing of the beams. When properly united a jar is not communicated at once to the wall nearest the cause of disturbance, but carried over the entire floor, and the effect lessened by its being shared by the walls of the whole house.

It is customary to deaden all the floors in a city house by the means of an interlining of builders' felt. In the country or in houses where expense is rigorously considered it is often only the floor immediately over the living rooms which is so treated. A rather prolonged experience of country houses leads us to conclude that if any floor is to be put down without the felt it is just that one which can be deprived of it with the least discomfort to the inmates of the house. When people are coming and going out of doors or all gathered together in one part of the house, the passing to and fro overhead is reduced to its lowest limits, and what does go on in the matter of service for the most part takes place without notice. It is

very different with bedrooms which have other sleeping-rooms over them. The latter are, as a rule, occupied by the servants. Their perforce earlier hours and the later ones they indulge in by preference disturb us just when quiet is most at a premium. For reasons of economy as well as hygiene and saving of labor their floors are never elaborately carpeted. Steps resound and voices carry. The length of time it takes the maids to dress in the morning and to subside into quiet at night when measured in minutes may be short, but it seems interminable to the person anxiously courting sleep below. The greatest care in deadening and the thickest rugs belong in the third story of a country house.

We should advise the finishing of all floors in hardwood. It is much more sanitary. It removes the bugbear of house-cleaning. It is cheaper in the end. The cost of a hard pine floor, shellacked and varnished, leaves but a narrow margin for covering over the expense of the soft pine. With the added cost of jute or cotton rugs it is not much more than what a carpet covering a soft pine floor and the floor itself would be.

A house closed part of the year should have no permanent carpets. Dust and moths in the summer and dampness in the winter will soon dispose of carpets if left on the floor, while the labor of lifting and storing each season is enormous.

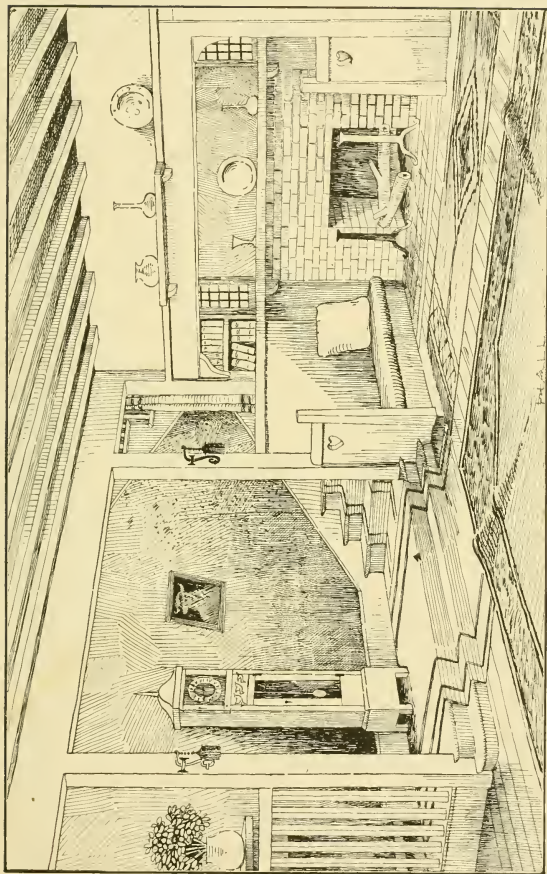
DOORS

Doors should never be opposite each other if it is possible to avoid it. Nor should one door in opening come back against another. It is a most exasperating and unnecessary inconvenience, productive of impatience, torn dresses and the perverted martyr spirit.

They should not be too wide nor too narrow and not too high for the height of the room. There should be a little wall space over a door. If not the ceiling seems unnecessarily low.

STAIRS

The staircase may be made a feature of great beauty in a country house. The delicate spindle work of the Colonial



Staircase and Fireplace in a Country House

period makes them specially attractive. The rail and newel-post should never be heavy unless in a hall of baronial proportions. The stairs should be wide and the treads broad. There should be at least one landing. The treads may be eleven inches to seven-inch risers.

The service stairs should be straight and wide enough to permit trunks and furniture to be carried up and down. Nor should they be steep. This staircase ought to be inclosed and have a door at the foot, this to prevent kitchen odors from rising and as a precaution against fire, the open stair acting as a flue. This door should not open into the kitchen if it can be avoided. The service staircase is a necessity for convenient work in a country house. Two staircases are also a safeguard in time of fire. It is only a very tiny building in which it is either comfortable or safe to have but one.

WINDOWS

Grouped windows are both cheaper and prettier than single ones separated by a wall space and are advantageous as well from the better arrangement of furniture possible. Plenty of windows is now the rule. The expense is not materially increased whether the space is filled with glass and mullions or stone and wood. The more light the healthier the house. When the view is especially fine a window of a single sheet of plate glass gives the effect of a picture set in the wall. To allow of cleaning, it may be set on pivots. If the single sheet is the centre of a casement filled in with smaller panes with a view to ventilation, these must be curtained or the effect is spoiled.

We wonder that it has never occurred to any architect or interior decorator to carve and adorn the window frame. No part of the house is more conspicuous or would give so good a return for expenditure of taste; no part of the house would lend itself better to carving's fine lines. Through windows comes the health of the family in sunlight and air.

But year after year architects and builders go on making window frames and moldings of parallelograms of plain wood,

even to the sashes, and then turning over the frame to the upholsterer to cover and rig in draperies. Any seller of draping stuffs would be foolish to lose his opportunity—and such sellers are commonly not foolish. As witness let me name the window I saw the other day in a house which sold that very day for \$275,000.

From an artist's view the windows were hideous. Each looked like a trumpery showcase for costly laces. You saw three curtains of white lace besides an old-rose velvet within and the conventional linen shade next the close-fitting lace screen. True art always subordinates stuffs to itself. This window decoration was mere vulgar display of expenditure. Architecturally the windows of the house looked like square port-holes.

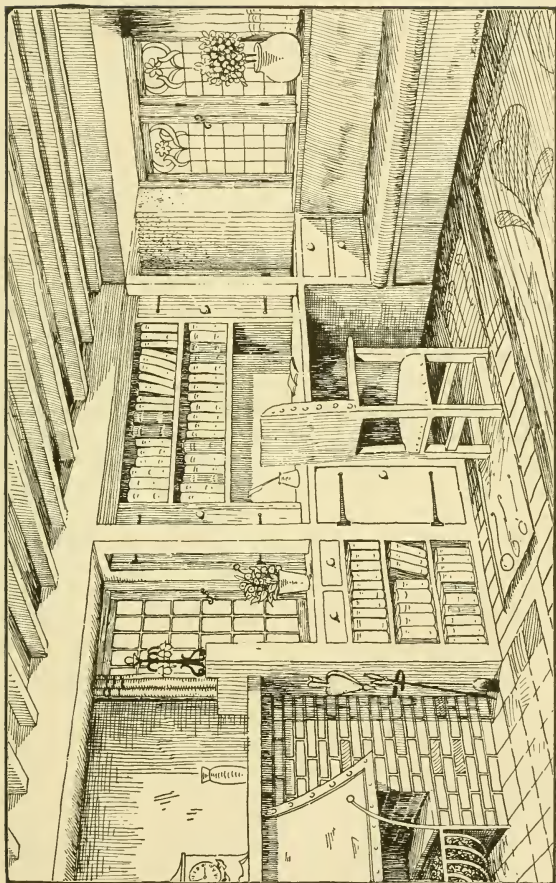
How much better would have been the result if, supposing the architect chose to keep to external effect, he had ordered these drawing-room window frames of some fine wood cunningly wrought in rose vines or clematis or Cape jasmine or Virginia creeper and had left them a beautiful and worthy entrance for God's air and light! Library window frames might be carved, supposing the workman were a master in the art, with busts, crests, monograms, or adorned with incidents of family history. And what more ornamental wreathing for a dining-room window than grapevines, the wild cucumber, blossoming apple boughs, or wheat in fine-colored woods? To the carver of window casings designs for his work are practically limitless. There are the endless arabesques of Moorish art and the delicate conventional flowers of the East Indian worker. I know one large drawing-room of exquisitely carved Indian wood, so elaborately wrought that you can not find a place big enough to cover with your thumb which has been untouched by the chisel. And at the drawing-room window are the slightest lace curtains.

With carved ornamentation rather than the draping of the window milliner what would be our gain? Better air in our houses, better health, better eyesight—for the eye would be rested by change of focus, by opportunity now and then to

gaze at a distance. There would be less dust, for curtains are nurseries of microbes. Doctors' bills would be lessened, weak eyes would be healed, and, of equal value, a better taste would prevail. If peeping Toms were over the way a screen of delicate lace flat against the pane, or of stained glass set some distance within the room, would interrupt their prying.

There are some things which we should remember when we plan our windows, one in especial. Anything which interferes with the uninterrupted vision is a strain on the nerves. In any window the middle bar should be above the eye line. It is a real trial to have one's sight cut off half-way when one looks out, particularly if there is a view to be enjoyed. It is a fashion at present to make the upper casement of windows in a country house of small panes set either diamond fashion or square. This is done not only for the agreeable variety which the mullions give to the outside aspect of the window, but because it is possible to obtain clear glass in small panes without using the expensive plate glass. But the cut-up casement is a frightful annoyance to the person inside if it comes within her natural scope of vision as she stands at the casement. Our picturesque windows certainly contribute their share to the national disease of nervous prostration. One architect solved this problem of effect and comfort with great satisfaction to the inmates of the house and with an added and pleasing quaintness of exterior. He made his windows about six feet wide, but not more than three and a half high, and he set them in the wall at such a height that the middle bar of the casement was above the eye-line of a person of ordinary height as he stood. It was still possible for one sitting by the window to look out without difficulty and the ornamental diamond panes of the upper sash were raised above the natural line of vision. It was an eminently restful house to live in for that reason.

The French casement window has its charms. That in order to be weatherproof it must open outward seems to bar its efficiency in a country where we must guard against flies with screens. The difficulty can be managed, however, if we make the screen over the entire surface of the window and



Window and Bookshelves in a Country House

hang it on hinges on the inside. The long rods which control the opening of the sashes can be run through holes bored through the frame of the screen and easily managed from within. Some room for the bar to play must be left, but a rubber ring slipped over the bar closes the aperture effectually.

When we arrange our windows we should remember that every room should have a cross draught. Every bathroom and water closet should have a window to the sun if possible. There is no cure for germs better than sunlight.

SCREENS

The value of the screen gauze must be properly appreciated by the housebuilder and homemaker, and an ample allowance made for screening every opening. We do not recommend sliding screens, either those adjustable of commerce or those which may be pushed up or down for either sash. Window cleaning becomes difficult if this kind is used, while the adjustable variety seldom fits accurately enough to shut out the enterprising fly. A screen which covers the entire window, made on a stout frame braced at the corners to prevent warping, is the best. The windows may then be down from the top or up from the bottom without causing the homemaker any anxiety as to the conscientiousness of the family or the wisdom of the guest. We often see these screens hinged at the top and opening upward. The better way is to hinge them on one side and fasten them firmly on the other with hooks and staples. They then will swing out for window washing, carrying with them whatever flies may be crawling over their mesh at the time. Screen doors should always open out. A screen door swinging inward defeats its own end, for it brings in when opened more flies than it keeps out. It is the special care of each member of the family to see that the screen door is kept closed, and not allowed to bang in closing either. Where there are dogs and children the lower part should be reinforced with chicken-fence gauze.

Seaside homes require to have the piazzas or porches

screened if the owners are to have the real benefit of them. When screened and lighted they are far more agreeable as sitting-rooms in the evening than any spot indoors can be. Otherwise they are constructed more for the convenience of the mosquito than the owner.

THE PIAZZA

No house which is to be occupied between May and November is complete without a piazza. This should be broad and deep, on the breeze side of the house and also on the view side if there is a view. We say the breeze side, but there are localities where the quiet side of the house is to be chosen. A piazza on the east of the house is pleasant morning and evening, but the rooms which open on to it are dark, particularly in the afternoon. The west side of the house is not open to that objection, but the piazza itself must be shielded by curtains or it is uninhabitable the greater part of the day. In a breezy place the curtains are an added aggravation, flapping as they do, and tearing from the rings. The piazza should not interfere with the windows of the cellar. Piazzas are built nowadays with low hanging roofs and inclosed up to about three feet from the floor, making them really outdoor parlors. The windy side is sometimes shielded by glass casements which roll back if desired. This is an admirable arrangement when the house is small, since it gives the occupants the use of the outdoor sitting-room at all times except in the most inclement weather.

In some houses the piazza is replaced by a porch. This is the English style, the result of a climate which makes necessary some shelter over the door from the weather. The piazza we have borrowed from southern countries, where the object was to shield both windows and the inhabitants of the house from the sun. The modern porches are really rooms built out in front of the door, finished up to three or four feet from the ground, with an overhanging roof, built with settles at the side. Both piazzas and porches are furnished with chairs, rugs and tables, and are the best used part of a country house.

SPECIAL FITMENTS

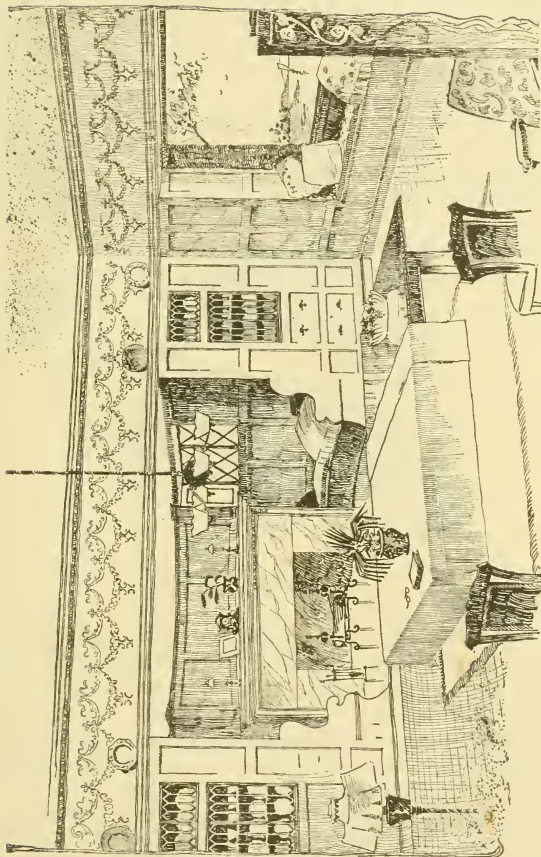
These are pieces of furniture made of the same wood as the finishings of the room, such as sideboards, settees, hall tables, hatracks, dressers, etc.

In the case of a summer house or a house to rent special fitments have a decided value. They lessen the amount of furniture required and also the amount of care. They should always be made removable, however, and the walls properly finished around them. It is easier and more satisfactory to do this in the first place than later if we wish to replace the carpenter's work at any time. There is also a commercial side to the business. Built in they would not raise the price of the house in the case of a sale, but removable, there is always an extra allowance made. This is more than the cost of finishing the wall.

Of course, no work of the carpenter can replace really good furniture, whose design is the summing up of the culture of civilization and whose execution is the expression of the highest skill of the craftsman. Such furniture, alas! is not a thing offered for sale every day, nor is the price small. When the funds are limited it is far better to trust one's carpenter to fashion from designs of the architect simple and durable articles, and to content one's self with only the most necessary pieces of furniture, waiting to pick up the good ones one by one as opportunity and money allow.

We offer various illustrations of special fitments, all of merit in their own style, which may serve as suggestions to future homemakers. (See Plates VI and VII.)

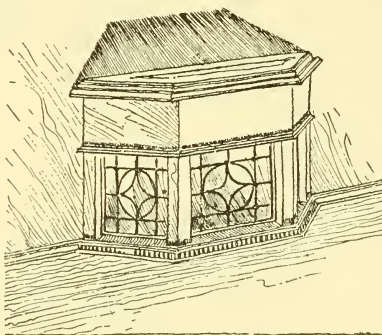
The Colonial dining-room by Hobart Walker shows an admirable arrangement of fireplace, chimney corners and cupboards. This dining-room, it will be seen, needs no sideboard or china cabinet. The delicately mullioned glass doors of the cupboard replace the cabinet, while the drawers beneath are receptacles for napery, silver and table hardware. Such a dining-room requires but the table, chairs and serving table to be perfectly equipped and most homelike. Another dining-room is shown on Plate VIII.



A Colonial Dining-Room

Among special fitments always to be recommended for country houses are bookshelves. In the city books should be kept behind glass both for their own sakes and for the lessening of the household cares. Where there is little dust the open shelf is a pleasure in which we can indulge ourselves. The bookshelf is appropriate in all rooms. Do we not desire to have our friends about us? And are not books the best friends of all, invariably patient, free from moods, always offering us their best fellowship?

The two examples given, a book-lined wall with diamond-



A Bay Window on Top of a Bookcase

paned window set in and the mantel bookshelf, are original in idea and satisfactory in execution. Admirable, too, is the shelf or two here and there where space can be found for them in the other illustrations. A novel idea recently executed was the rescue of the space between the fireplace and the first stud on either side. This, ceiled and set with shelves, five inches wide, was an attractive finish for the simple mantelpiece. Bookshelves should not be too wide, particularly in these special fitments. Five inches will accommodate the book of ordinary size. More space is space wasted. Very large books should have a compartment to themselves.

We have seen a very charming effect in a room whose prevailing tint was green, of glass doors for a recessed bookcase, made of the faintly toned green glass once so common. This put together in a graceful design with leads gave the gay bindings of the books inside a harmonizing greenish tint which reconciled the most startling to the room and to each other.

The small bay window shown is a very dainty design for at once lighting the side of the room furthest from the windows and making the use of the bookcase beneath comfortable. This bay window, about two feet and a half in length, and wide and high in proportion, rests on the top of the bookcase. Its panes are of delicately tinted glass, leaded. The recess on the hall side is utilized for a bowl of flowers. It is a most welcome break in the long length of that side of the hall and adds quite as much to the hall as it does to the living room for whose benefit it was designed.

VII

SANITATION AND VENTILATION

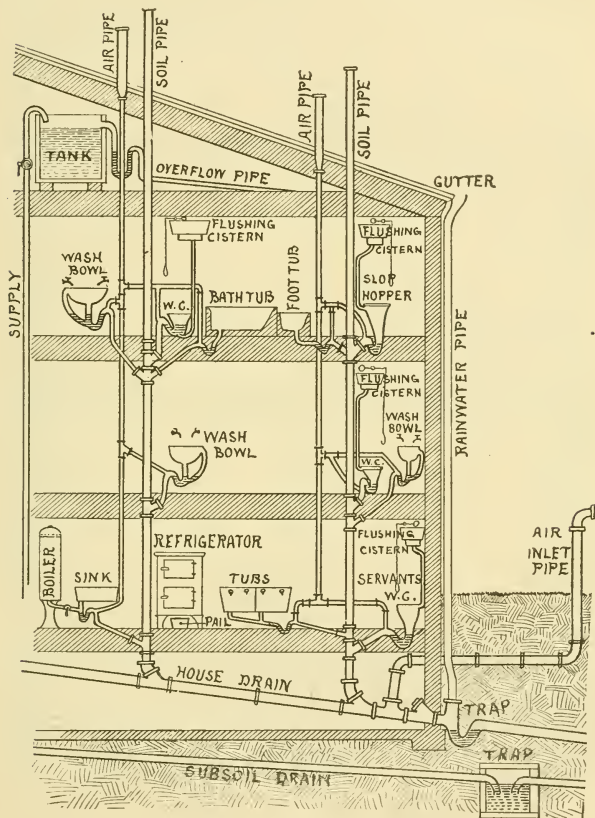
Plumbing—House Drainage—The Removal of Waste Matter—The House Drain—Disposal of Rain Water—Tests of Plumbing—The Care of Plumbing—Ventilating System for Plumbing—Drip Pipe of the Refrigerator—Overflows—Cut-offs—Sewer Gas—Value of the Asphalt Floor—Ventilation

PLUMBING

THE introduction of modern plumbing was the greatest advance ever made toward the prolonging of life and increase of power to enjoy its benefits. We are nowadays so used to its comforts that we have no conception of the stress of life without them. It needs a sojourn in an old-fashioned country house into which all water is carried by bucket from well or spring, where the vault is out of doors at a distance, to make us appreciate the blessings of a plentiful supply of water and the means of disposing of the waste of sink and closet without thought and labor.

Yet plumbing, like all mundane blessings, is a matter of constant care and attention as well as of expense. We have already alluded to the fact that this part of the cost of building a house is proportionately large. Here as elsewhere it is cheaper to do the thing well in the first place. Plumbers' repairs are proverbially costly. Yet there is to plumbing as to everything else in constant use only a certain life. A cellar properly built, barring earthquakes and landslides, is a thing whose initial outlay is the only call it makes upon the pocket-book during its existence, outside of the periodic cleaning and whitewashing. Plumbing, on the contrary, though constructed from apparently indestructible materials, is in constant wear and must be renewed. Sanitation is also a growing science, and the last word is very far from being said. Plumbing of ten years ago is on its way to be antiquated. The obligatory

renewals have at least the advantage of giving us the opportunity of using all recent discoveries and improvements.



Good Plumbing: Everything As It Should Be

The householder must then face the necessity of a large initial expense with the knowledge that he does not get a

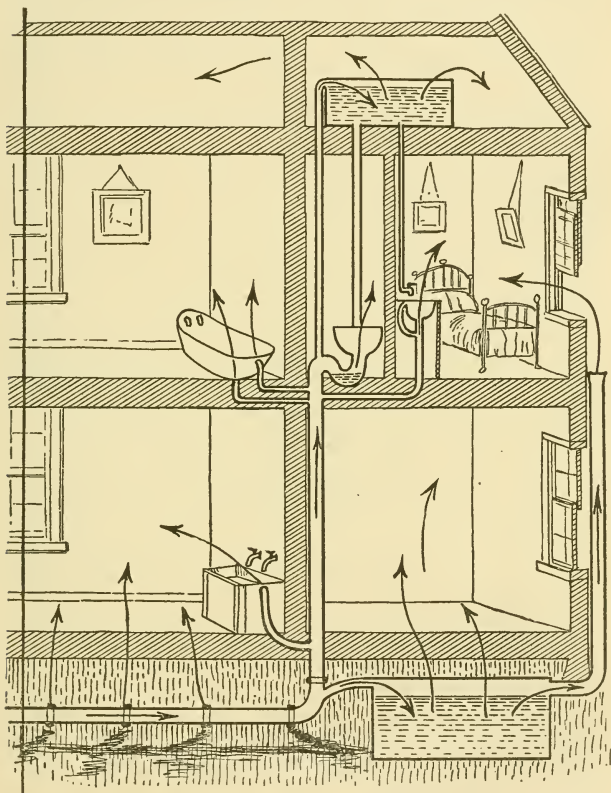
permanent thing. Yet he can not afford to put in inferior appliances with the idea of making them do for the present emergency. Pan and hopper closets can not be tolerated, nor anything which saves money at the risk of bad sanitation. If very limited in purse he may reduce the amount of fixtures, but never the quality. He should regard his plumbing also as furniture, not as part of the house. Carpets and hangings wear out, chairs and tables break or become out of style, yet it is our practice to buy the very best we can afford and enjoy the use of them. We never heard of a man who in buying a carpet deliberately stinted himself in the price because when said carpet was worn out he would be forced to purchase another. Life is uncertain, he would reflect; he might not live to need another carpet and would get the best he could. The home builder should also reflect that life is uncertain, perilously so with inferior plumbing, and spend with enlightened discretion.

When we speak of expensive plumbing we do not mean showy fittings. Onyx tubs and solid silver fixtures are not necessary. We mean the best materials put together in the best way. We may dispense with even the nickel plating on the pipes, but those pipes must be of the first grade of lead and be faultlessly adjusted. Porcelain tubs also are not imperative. Iron painted will hold as much water and keep it quite as warm. Such accessories as needle baths and Roman plunges, while they are decided luxuries, are not absolute necessities. First-class fixtures are.

Modern plumbing separates itself into three divisions: First, the carrying the water into the house and to the different parts of it as required; second, the means of its use—tubs, sinks, etc.; third, the method of disposing of the waste after use. Sometimes there is the question of storage to be considered.

In the first division is included the heating of the water for use in different parts of the house. This is usually done by means of a water-back, a small reservoir in the stove or range, which connects with an upright tank nearby called the boiler.

Occasionally—when there is a furnace in the house—there is a pipe carried into the hot-air chamber of the furnace to rein-



Bad Plumbing: Nothing As It Should Be

force the water-back. This is available in cold weather only, unfortunately, and experience teaches that there is even a

greater demand during summer than winter for hot water in the laundry and bathrooms. The most satisfactory arrangement when it can be had is that mentioned in a previous chapter, a special hot-water heater. This consists of a coil of pipe carried round a small firepot. It consumes very little coal and requires very little care. The English fashion of storing the hot water in a large tank in the attic is also to be commended. Gas heaters are too expensive for ordinary use.

When the pressure in the pipes is not sufficient to carry the water to the top of the house at all times of the day there should be a tank for cold water. As a rule, this will fill during the night, when there are fewer demands on the water supply. Where the house stands very high there should be some arrangement for pumping, either by hand or by means of a small engine.

The second division of plumbing, as we have said, concerns itself with the tubs, basins, closets, and sinks, which either have been or will be considered in connection with other parts of the house, and comprises the soil and waste pipes and the system of ventilation for the same—that is to say, house drainage.

HOUSE DRAINAGE

The three canons of house drainage, as stated by Roger Field, are:

First—All refuse matter must be completely and rapidly removed.

Second—No passage of air can be allowed to take place from drain or waste pipe into the house.

Third—No communication can be permitted between the drains and the water supply.

There is one more which may be added: no plumbing should be concealed behind plastering or in any way so placed that it can not be easily inspected at regular intervals.

THE REMOVAL OF WASTE MATTER

Waste matter is carried off by soil and waste pipes. The soil pipe should be four inches in diameter. It should be carried in

a straight line at least two feet above the roof for ventilation and be away from windows, chimneys, and fresh-air ventilators. It must be protected by a wire screen from the entrance of leaves and birds. It must be made with caulked lead joints and coated inside and outside with asphalt or some similar substance. All branch pipes must connect with Y joints. It enters the drain with an easy bend and without a trap. There should be an outlet to the fresh air before it enters the drain, this being carefully protected from the entrance of animals and leaves and at a safe distance from windows or the cold-air box of the furnace. The fresh air will enter and be sucked up the length of the pipe and carry with it the odors and gases which form there.

If the drain runs under the house, as is necessary in the city, to connect with the street sewer, this opening must be on the street side between the house and the trap to the sewer. This is independent of the ventilating system.

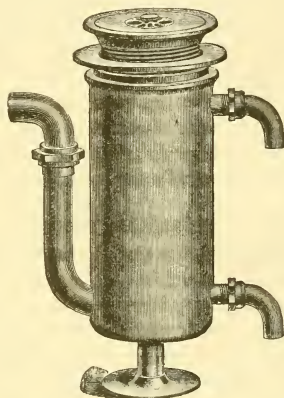
THE HOUSE DRAIN

The house drain, like the rest of the plumbing, should be in free sight or easily accessible. It may be carried along the cellar wall or the pipe may hang from the ceiling of the cellar at a sharp incline. If it is under the floor of the cellar it must be laid in a masonwork trench with inspection chambers in the broken stone substratum of the cellar floor. It must be protected from the settling of the cellar wall where it passes through by either an arch or a long stone properly supported.

Outside the wall the pipe must be small, not more than five inches in diameter, in order that it may be thoroughly scoured by the rush of water. It must be remembered that only the contents of soil and waste pipes come through this drain. There must be a continuous grade of at least one in fifty; one in twenty-five is better. The joints must be tight. If in made ground or quicksand or near trees or near a well, the pipe must be of galvanized iron. Otherwise it may be of earthenware with cemented joints. There must be a trap easily accessible for cleaning, outside the house. Some of these stipulations apply,

of course, only to the drainage of a city house which connects with a street sewer. In the country there is no need for carrying the drain under the house, and the trap must be near the cesspool or outlet.

The pipe to the kitchen sink should be two inches in diameter and should be provided with a grease trap. The chilled grease in the kitchen pipe accumulating and putrefying is a deadly element in house drainage. A grease trap is an arrangement by means of which the water from the sink is

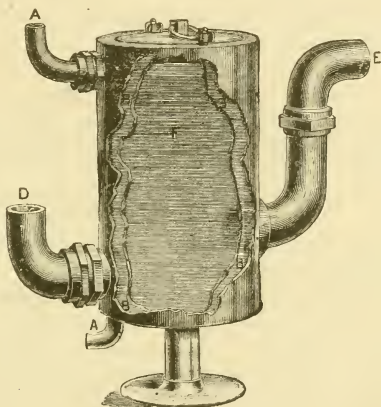


Grease-trap

retained long enough to become cooled. The grease then rises to the top. The cooling is assisted by means of a water jacket; that is to say, a space around the outside of the trap, but not connected with it. Through this water jacket flows the supply of cold water for the sink above. In large establishments it is the supply for the boiler which is carried through, since more hot water is used than cold, and the cooling surface will thus be constantly renewed.

The accompanying cuts show the latest model of a grease trap. The sink is cut out to receive the top of the trap inside

of the sink. The waste pipe from the sink then passes down the centre of the trap. The lining can be lifted out to clean. The outlet is so arranged that when the trap is full of grease it causes a partial stoppage in the sink, thus giving notice to lift out the inner lining, which will remove with it, when raised, all the accumulated grease. The waste water from the sink fills the trap to the level of the outlet E, which is shown by the dotted lines F. The cold-water supply pipe must be connected to the couplings A A, which communicate with and fill



Water-jacket Within Grease-trap

the chamber B; thus the entire surface of the trap may be kept the same temperature as the water supply, which is conducted to the chamber B, through the bottom coupling A and out of the upper, A. The trap stands on the floor. Its reservoir will hold a couple of quarts of water. The expense of this particular style varies from thirty to sixty dollars, according to material. This is one of the expenses which pays for itself in saving. It does not require many calls for a plumber's aid in freeing a grease-laden pipe to run up a bill of thirty dollars.

Part of the household equipment should be a pipe pump. This is a small rubber contrivance which can be operated by any one. It should be used not only on the kitchen sink pipe if there is no grease trap, but on all the waste pipes in the house once in a while. There would be then practically no danger of siphonage through accumulation of fibrous material.

A housemaid's sink should have pipe three inches in diameter and run up to the roof, as is the custom with a soil pipe. No soil or waste pipes should be carried under the floor, trusting to flushing to cleanse them. They should be carried down as directly as possible. The waste pipes are usually united with the soil pipe toward the bottom of it.

DISPOSAL OF RAIN WATER

Leaders should never be used as either soil, waste, or ventilating pipes. They should be trapped before entering the drain.

TESTS OF PLUMBING

All pipes must be airtight. They may be tested by the peppermint or the smoke test.

The smoke test is made by stopping the entrance to the drain and opening to the roof and introducing burning straw at the ventilating opening of the soil pipe. If there are leaks in the joints or imperfect water seals the smoke will be perceptible. The plumbing must then be instantly overhauled.

To test with peppermint two ounces of oil of peppermint are poured into the soil pipe at its mouth above the roof, if it is accessible, or into the basin or water-closet nearest the roof, first closing the vent pipes which appear above the roof. Immediately after a pail of hot water is poured down; if the odor of peppermint is perceived at any lower fixture, it is an indication that there is an opening in the pipe through which the foul air may escape. The peppermint for this purpose is sold in two-ounce vials hermetically sealed. It should be kept out of the house until needed, and the person who pours it should remain on the roof or in a closed room until the examination

of the fixtures below has been made; otherwise the odor from the bottle or his clothes will be apparent and spoil the test.

In some large apartment houses the exhaust steam is turned into the soil pipe, thus creating a current of warm, rising air. If a trap should be out of order the fact is soon betrayed by the steam which appears in the bowl. Not infrequently lamps are kept burning in the ventilating pipe. This should always be done if the water-closet has not an opening into the open air.

THE CARE OF PLUMBING

For us to be strictly safe every person in the house, child, guest or servant, must understand the capabilities and limits of modern plumbing. The fact that modern conveniences have been with us for more than half a century blinds our eyes to the obvious fact that there has been a continual accession of irresponsible human beings who are entirely ignorant in the matter and must be carefully instructed, for, unfortunately, in the use of modern conveniences what seems the easier way is usually the wrong way.

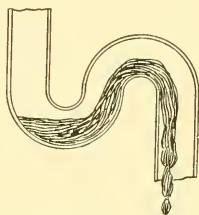
Conscientiousness is essential to success in all conditions of life. In all departments of homemaking it is most valuable, but in connection with sanitation it rises above the merely valuable, it is vitally necessary, for we are then dealing with matters of life and death. The responsibility is the more urgent in that except in rare cases the effect can not be directly connected with the cause, not to speak of the extreme probability that it is the innocent, not the offender, who will suffer. Nor is the effect immediate. We can be poisoned slowly. The poor health of later life can often be traced to improper conditions during youth.

It can not be too thoroughly impressed on the members of a family that the soil pipe is not intended for the disposal of any foreign matter whatever.

All fibrous substances are especially dangerous, owing to the facility with which they cling to all obstructions and the way they aid in arresting decomposing substances in their onward passage. They also hang half in and half out of a

trap and slowly draw the water by capillary attraction over the bend, depriving us of our safeguard against sewer air and its concomitants.

There is a good deal of wilful carelessness still to combat when ignorance is fairly routed. It was forty years ago that a young lady from the country caused an outbreak of diphtheria in a boarding school by throwing a bouquet down a water closet. Such a thing would be impossible now, yet no one who has traveled much or entertained in her own house can fail to be amazed at the number of women who seem totally ignorant of the uses of a hair-receiver or scrap-basket. It is not every house which possess the doubtful blessing of a housemaid's sink, whose grating certainly prevents the passage



Syphonage Through Action of Fibrous Matter

of solids into the pipe, leaving an ill-smelling mess to be disposed of otherwise. The conscientious housemaid may pick hair, matches, fragments of stiff letter-paper out of receptacles intended for liquids only. The probability is, however, that her native politeness will prevent her from interfering with any arrangement of her superiors and hair, etc., will go into the water-closet regardless of consequences.

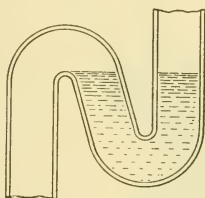
VENTILATING SYSTEM FOR PLUMBING

Plumbing should be confined as far as is convenient to one portion of the house and be as open to the air as possible. Pipes carried through a room to the floor above should be cased in wood and the front of the shaft fastened with screws,

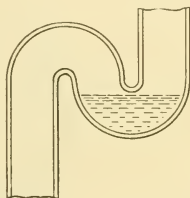
not nails. When there are fixtures in an inside room, as is the case in some of the old city houses, there must be a special ventilating shaft running to the roof.

There must be a system of ventilation in the pipes themselves. If water will fall through a pipe air will rise, and unless the danger is guarded against the air from the sewer will enter and permeate the entire house. This is to be prevented by a system of traps and a ventilating pipe connected with them.

A trap is a bend in a pipe, with or without enlargement, which retains a sufficient quantity of the water which passes through it to prevent the passage of the foul air back into the room. The "S" trap and the bottle trap are in common use.



An "S" Trap



Trap in Which Seal is Broken

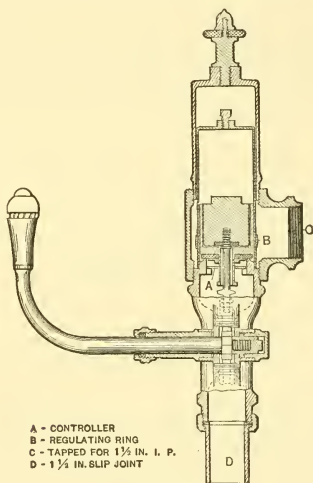
The water standing in the trap is called the seal. It is effective when it stands at least one inch above the bend in the pipe. If it is lower than the bend a space is left above for the passage of foul air back into the pipe and the seal is broken.

Every sink, every basin, tub and closet must have its own trap and only one. If a fixture has two traps or if there are two traps on the same length of pipe, the air between them may be so compressed that it will force itself through the trap having the shallower water seal. When an irregular gurgling sound is heard the cause will be found to be in the unnecessary trap, which should be removed. Overflow outlets must enter the waste pipe between the basin or tub and the trap.

Water-closets should be of the pedestal kind, which are

their own trap. They should be furnished each with its own reservoir holding a sufficient quantity of water delivered with sufficient force to completely scour the trap and branch waste pipes. This requires two or three gallons at a flushing. The supply for flushing must not come directly from a reservoir cistern from which is drawn water for drinking, for cooking or for the hot-water system.

A recent invention which does away with the overhead

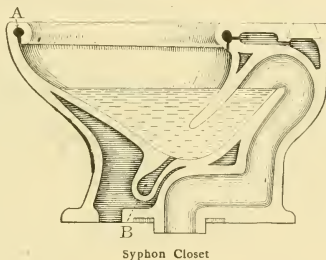


The Flushometer

tank is the flushometer. In the tank the influx of the water from the pipe raises the float, which when the tank is full closes the valve. This contrivance is apt to get out of order. If the rod of the float does not hang exactly as it should the valve will not close and the influx of water is not cut off, but continues running to waste. In many country houses where water is a scarce commodity this is a serious loss. The valve of the new flushometer is closed by the action of gravity, the water

itself as it runs through gradually lowering it. The pressure of the water, as a rule, is that in the main outside. There must be a pressure of at least ten pounds. If not, one tank may be used to supply the proper pressure for the whole number of closets in the house. The valves are variously constructed to adapt themselves to the pressure available. The advantage of this invention is its simplicity.

The cut of the closet shows the water seal of this style of fixture, which is the most perfect of its kind yet introduced. Its action in emptying is not only due to the water which pours down from the flushing rim (A) which surrounds the bowl, but to a jet which spurts up through a small hole in the bottom (B), causing a siphon action which carries out the contents at once.

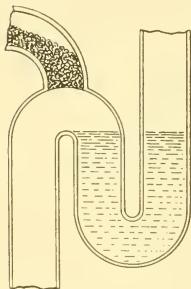


A pipe known as the ventilating or anti-siphonage pipe should run from the ground to the top of the house alongside the plumbing system. Into this run the vent pipes from the trap.

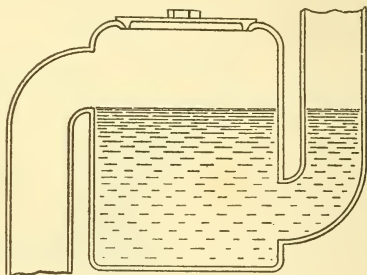
When a body of water with considerable momentum is discharged into a pipe, as in emptying a pail of slops or flushing a water-closet, it drags air along with it and partially exhausts the air in all the branch pipes. The pressure of the atmosphere outside of the pipe upon the water in the trap will then be greater than that from the inside of the pipe, and the water in the trap will be forced down into the pipe until the water seal is broken and space left for the foul air to rise into the room.

The vent pipe is an air pipe attached to the highest part of

the bend in the trap on the sewer side of the water seal. This affords free admission of air to the inside of the pipe to balance the pressure of the atmosphere outside and preserves the water seal when the air in the branch waste pipes has been swept along by a discharge of water. In old plumbing the opening sometimes becomes clogged and the pipe is useless. Vent pipes are usually required by plumbing laws. Pot traps are not recommended. A small one will not resist siphonage and a large one will retain filth and clog. It is not always convenient to connect basins, sinks, and tubs with the ventilating pipe by means of a vent pipe. In such cases the bottle



Clogged Vent Pipe



Bottle Trap

trap, which resists siphonage, is used. This requires frequent cleansing. All traps should be provided with inspection caps.

Ventilating pipes are of lead or galvanized iron, well caulked with lead, and always as large as the soil pipe—four inches in diameter. All long branches of waste pipe should have special ventilating pipes. They should never end near windows or cisterns, or be allowed to discharge under slates or shingles, or stop just above chimney flues or discharge into the chimney. The tops require a grating or cowl.

DRIP PIPE OF THE REFRIGERATOR

The drip pipe of the refrigerator should never connect with the soil pipe or drain. It may discharge into an open sink in

the basement of a city house provided the waste pipe of this sink is properly trapped. The drip may also be carried by a special pipe, properly trapped, to the gutter.

OVERFLOWS

Under tubs, basins, and water-closets should be sheet lead trays if the floors are not tiled. The overflow pipes from these trays should not discharge directly into the soil pipe or drain. They may empty into the same open sink in the cellar as does the drip from the refrigerator.

The overflows from all tanks containing water used for drinking, cooking, or washing should not discharge into the soil pipe, but on the roof or into the sink in the cellar, before mentioned.

CUT-OFFS

There should be a number of cut-offs in the plumbing which would permit of one part being shut off without depriving the rest of the house of water. Each such cut-off should be provided with a faucet to allow the water above to drain out. There should be a faucet under the kitchen boiler.

SEWER GAS

It is a mistake to think that the dangerous element from which we take such pains to guard ourselves is a special composition of gas generated in the sewer. There is really no such thing as sewer gas, and sewer air is not essentially different from that which we breathe out of doors. It is slightly vitiated, containing about two per cent more carbonic acid gas and the same proportion less of oxygen and possessing a trace of sulphide of hydrogen, but unless heavily charged with illuminating gas from leaks in the mains it is in no sense deadly. Nor does it contain a very much higher percentage of deadly germs than the outer air. The dangerous bacilli are much heavier than the air. When dry they settle in the dust and when wet they can not rise to any extent. In the sewer decomposing matter is carried along in a semi-liquid condition and its germs with it.

Yet here is a pretty little list of diseases which go in the train of defective drainage and impure water:

Oriental plague, cholera, sore throat, diphtheria, scarlet fever, blood poisoning, puerperal fever, pneumonia, diarrhœa, enteric fever, general malaise.

With the exception of Oriental plague and cholera these are usually traced to defective plumbing by experts called in after an outbreak. How can this be reconciled with the statement that sewer gas does not exist and sewer air is not harmful?

If we read the reports attentively we find without exception that the trouble lies in the foul soil pipes of the house itself or in leaks through which filth has percolated, saturating the ground from which the germ-laden gases rise through wall and floor. The danger from sewer air lies mostly in the pressure, which, if the traps do not work, forces the foul air of our own plumbing back into the house. With well-ventilated, properly flushed soil pipes and drains there is nothing to dread. It is leaks and a collection of putrefying matter which are to be avoided.

We have laid special stress on the necessity of accessible and visible plumbing. We repeat that it is constant supervision that is needed for safety.

VALUE OF THE ASPHALT FLOOR

In a city house we must also protect ourselves from the carelessness of our neighbor. Here the asphalt and concrete floor is imperative. There are many cases of fatal illness on record resulting from the deadly emanations from arrested filth next door, when the plumbing in the afflicted house was in good condition. In one instance the possessors of the defective drain were rendered immune from its effects by reason of their own cement floor.

An invasion of rats should be considered a danger signal, and the plumbing inspected in consequence. These unpleasant visitors come from the sewers, and their entrance means, as a rule, that there has been a break somewhere.

VENTILATION

While we are careful to keep dangerous gases out of the house, we must be as careful to ensure a supply of fresh pure air. It is perhaps fortunate for us that our houses are not too well built, for the air which creeps in at casements and through walls is a material aid to ventilation. An adult human being will consume in an hour some three thousand cubic feet of air; that is, the cubic contents of a room twenty feet long, fifteen wide, and ten high. If shut in a room of that size, hermetically sealed, at the end of the hour he would die. Much of what we consider ill-health, evinced by headaches, listlessness, irritability, is simply due to lack of fresh air in our houses. And by fresh air we mean air without poisonous gases and with its proper admixture of oxygen. The absorption of one and three-quarters pounds of oxygen into the system daily is necessary for full health. If we do not obtain as much as that, we are preparing the way for consumption and all the types of bacillus poisoning, since the health of the blood depends upon its complete oxidation in the lungs.

It must be remembered that ventilation implies circulation of air. To change the air properly there should be some opening to the outer air high up in the house—a skylight, if it can be managed, which can be opened on either side. If there is only one opening there is danger of a down-draught when the wind on that side is high. If the skylight is impracticable, the opening of a window on the upper floor a little at the top is urgently advised. With this upper opening the hall will act as a flue and keep the house fresh and the atmosphere bright.

The open fireplace is the natural ventilator of a room. That heated air rises is a fact with which we are all familiar. We do not all recognize, however, that the heated air at the top of the room is much purer than that at the floor. The carbonic acid gas which we return to the atmosphere by exhalation of our breath in place of the oxygen which we have inhaled is much heavier than air, and sinks to the ground.

Drawn up the chimney by the open fireplace, the purer air descends in its place. All modern halls and places of amusement are ventilated on this principle. The bad air is sucked out by fans from the lower part of the auditorium and its place supplied from above. Of course the open fireplace is most effective when there is a fire, but there is in any case more or less draught up the flue. It is recommended to put a gas burner in the fireplace of the nursery near the hearth, which would serve as a ventilating agent and as well as a safe night light.

There should be some special means provided to carry off the warm air which lies near the ceiling in rooms which have no fireplaces and in the summer when there is no fire to cause a draught. When the windows run to the top of the room the ventilation is comparatively simple. Even with the windows shut a good deal of cool air will enter and keep the temperature down. When the tops of the windows are much beneath the ceiling there is neither a means of escape for the heated air nor an opportunity to cool it. Ventilating flues built in the wall are a feature of most modern houses, but when they do not occur there should be a narrow box, like the cold-air box of the furnace, running between ceiling and floor, from chandelier to the chimney flue, with an opening just above the chandelier and one into the flue.

The flue may be made use of for ventilation in the case of a wooden floor in either kitchen or laundry directly over the earth. A pipe running from under the floor into the chimney flue and a couple of auger-holes in the far corner will establish a perfect system of ventilation and dispose of all ground air, and keep the floor from rotting as well.

Rooms in the top of the house require an air space over them, and this must be ventilated or it will be impossible to keep them cool in summer. We have all experienced the baking heat of the country attic. It is this mass of heat overhead which makes the bedrooms seem close and stuffy. A cross draught in the attic will remedy this.

When a hot-air furnace is used there is a better chance

of fresh air than if the house is heated by hot water or steam, since it supplies through its registers fresh air which has been warmed. The hot-air chamber of the furnace should be large enough to allow of this air being merely heated. If too small there is danger that the air will be burned. This is very unwholesome.

When steam and hot water are used in indirect radiation—that is, when the house is supplied with heated air which has passed through banks of pipes filled with steam or hot water—the result is the same as if the air had been heated in the furnace, and there is less danger of furnace gas in the house; none of burned air. With direct radiation, however, unless each room is specially ventilated we have no change of air, merely the same baked over and over again. Here we must have recourse to the open window, when opportunity serves. There should be a pan or bowl of water on every radiator, to replace the moisture which is dried out of the air, in addition to the supply of fresh air which must be admitted.

If the heating arrangements are reinforced by gas or oil stoves, there is need for even more vigilance in the matter of fresh air. Cans of water on these stoves keep the air from becoming dry and unpleasant, but the water will not replace the oxygen which has been burned. If there is a fireplace in the room the gas or oil stove should be put in the fireplace and the windows opened from time to time.

The kitchen should have special ventilation of its own. There should be a hood over the range with a pipe into the flue, and small ventilators to the open air, near the ceiling, to change the air rapidly and prevent the smell of cooking from being sucked up into the top of the house when the door is opened.

Draughts are not ventilation, and windows are not ventilating agents, except for sudden and entire change of air. When we are forced to depend upon them, however, we should remember that even a tiny crack will make a great difference in the air. Merely to raise the lower sash until the bottom of the wood at the top is on a line with the top of the casing

of the upper sash will give admittance to any amount of fresh air without perceptible draught, unless a person is sitting near the window.

Windows should be opened at night, but the direct admission of the outer air is not considered safe for invalids or delicate children. A flannel frame which fits into the space between the lower sash and the top of the window would prevent a strong draught and screen the air from impurities. It should be remembered that when the air in the house is warmer than the outside air more air comes through the walls than when the temperature is about the same within and without. It is then not necessary to keep the windows at night so far open; nor should we admit foul air under the impression that we are doing our duty in ventilating the house.

VIII

SANITATION OF A COUNTRY HOUSE

The Cesspool — The Earth Closet — The Distribution System — What May Happen—
Disposal of Garbage

THE problem of sanitation of a country house or house of the small town differs materially from that of the dwelling of a compact city. The disposal of the sewage is not usually provided for by a public sewer in the country or small town, but falls to the responsibility of the owner of the house, and as a rule is complicated with the necessity of preserving the purity of the water supply. When the water is brought from a distance or furnished by an artesian well, there is only the best and cheapest means of disposing of the sewage to be sought.

THE CESSPOOL

All authorities join in condemning the common cesspool. This is an underground receptacle lined with bricks or stones so loosely laid that the liquid contents and the noxious gases generated escape into the soil. This is exactly what they are intended to do. The objection to this arrangement is that the gases are apt to make their way back into the drainage system of the house, and to permeate the ground, polluting the cellar air if the cesspool is near the house, while the liquid contents spread through the soil and contaminate the water of springs and wells in the vicinity, and sometimes at a great distance. Such a cesspool is a constant danger to the immediate household, and is objectionable in the interest of the public health.

In theory the distributing cesspool is quite correct. Our main concern with sewage is to convert it from matter in a state liable to endanger health into innocuous substances.

We know that all organic matter carries in itself the means of its own dissolution and resolution into chemical elements, in the shape of various kinds of microscopic organisms. These are held in check by that mysterious power we call life which is inherent in the larger body. No sooner is that power withdrawn than they assert themselves, and proceed as rapidly as possible with their appointed work of converting organic matter into inorganic forms, ready to supply the needs of another kind of organism. Like all transition periods, the conditions are unpleasant, and if interfered with the results are evil. Moreover, these beneficent microscopic organisms are zealous and absolutely indiscriminating. They attack all organic matter, living as well as dead. Some of them are deadly to human life if present in too great numbers and become in so far malignant beings. Recent discovery has taught us that the remedy is to oppose them with other organisms which destroy them. In the larger animal this opposition is established without conscious action on his part. If he is in good condition he may resist the onslaught; if undervitalized, he succumbs.

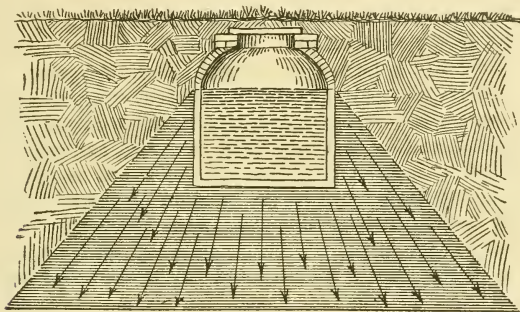
In the disposal of sewage in the country, we must take the same course which the living being institutes for itself. All domestic forms of the disposal of sewage, it will be noticed, have the ultimate intent of disinfection by the means of the soil.

This has been the course from the time of Moses down, the effect being known, though until recently we were ignorant of the cause. Experiments have shown, however, that in the soil are germs which are destructive to the dangerous germs in sewage. It will be remembered that in epidemics of typhoid fever which are traced to the water supply the cause is almost invariably a direct infection from dejecta, not from liquids which have percolated through the earth. The earth-closet is based on this principle of disinfection by means of the soil.

The trouble with the ordinary cesspool is that we give it too much to do and keep the conditions unfavorable. The

soil can not accomplish its work if wet, and instead of killing the germs in fact facilitates their growth. The ground becomes saturated, and the liquid carrying the germs percolates further and further away, and is washed down by rains and carried into the well and spring. The extent of the pollution of the earth about a cesspool, says a recent writer, can best be described as a cone whose base is equal to double the depth of the cesspool.

The peculiar properties of different soils must also be considered. Where clay predominates, however loosely built,



Area of Pollution of Cesspool

the cesspool becomes only a kind of bottle, retaining all that is put into it. Sandy soils distribute freely, but sand has very little effect on sewage. The liquid matter, almost unaltered, sinks down until it strikes either a harder level or an understream, and follows the course of either. In some cases it finds its way back into the well of the very house from which it comes, though the cesspool itself may be a long way from the well.

Loam, on the contrary, is an excellent disinfectant, but its powers can be exhausted. Moreover, it can be put to almost as good use on the top of the ground as below the surface.

THE EARTH CLOSET

There is an erroneous idea prevalent concerning the amount of solid matter contained in the discharge from the water-closets of a private house. It is not the quantity but the quality which is dangerous. When earth closets are used exclusively for a family of fifteen people, the amount collected during the summer will not exceed ten cubic feet, including the loam used to disinfect it. This amount contains a large quantity of water, and if left until spring will shrink one-half.

There can be no doubt that in the country earth-closets are more hygienic than other methods of disposing of human waste. If the outdoor earth closet has a cement floor and sides three inches high, there is absolutely no danger of seepage, and if the supply of earth is sufficient there is no odor. It is its extreme inconvenience which stands in the way of its use. It must be separated from the house, and even when connected by a covered passage it is awkward of approach and also practically out of the question in cases of illness. In cold weather it is an absolute menace to health.

Unless entirely out of the question, we advise a water-closet. When there is no chance of having the water carried over a house by pressure, enough for a water-closet can be pumped by hand into a tank in the top of the house. This is not recommended unless the family is small. Where the amount of water consumed by a family is necessarily great on account of numbers, there should be some arrangement for supplying running water for all purposes.

THE DISTRIBUTION SYSTEMS

If there is sufficient land around a country house, there are several good methods of disposing of the sewage. They must be as nearly automatic as possible. Systems which depend upon man power as an agency find in this country an insurmountable obstacle in the prejudices of the farmhand or handy man. He strongly objects to that part of police duty which concerns cesspools and privies, and absolutely

declines to consider their contents as available for fertilizing purposes. The raking and scattering of barnyard manure does not appear to him as the same thing at all. Possibly the entirely vegetable food of cow and horse may affect his imagination. It is only a Chinaman who understands the economic treasure of the contents of the cesspool.

Water from the leaders can not be included in the house drainage. Its value as a flushing agent is more than balanced by the fact that it forces us to dispose of an enormous quantity of liquid just when the ground has as much as it can look after without this extra supply. Rain water, too, should always be made available for the use of the householder. It may be used to fill the ornamental ponds on the place if there is otherwise a bountiful amount of soft water. If not, the rainfall should be stored in a cement cistern for laundry purposes. One man whose well was unsatisfactory cemented it and turned the water from the leaders into it, with excellent results. If no other means of disposing of the rain water is feasible, it may be conducted directly into the gutter of the street. In the country there could be a waterway paved with rough stone running down the hill to the nearest water-course.

The most satisfactory system yet known of disposing of house drainage is the distribution system. In this system the waste from the house empties into a watertight cement cistern. This discharges itself periodically by siphonage into another, from which run lines of tile drain, lying eighteen inches or two feet under the surface of the ground. These are arranged in herringbone fashion, the lines not more than twenty feet apart. The liquid thus periodically emptied runs with sufficient force to carry the semi-solid matter with it, and flushes itself at each discharge. It requires between two and three acres of land to dispose of the drainage from a house containing fifteen people.

Where the initial expense of the distribution system is prohibitive we must content ourselves with as near an approach to it as possible. In all such modifications there must

be a separation of the waste from bath, sinks, and laundry from that of the water-closet. It would be advisable also to separate the water from baths and basins from the discharge from laundry and sinks. The former, in a purely summer house, may be carried out directly from the bathroom into pipes which discharge into a grated sink. Where the house is occupied during the winter the pipe must run below frost into the ground. This pipe or the sink mentioned above connects with an iron pipe caulked with lead which runs from the house a distance beyond the well equal to at least twice the depth of the well. The contents then discharge into a stone drain, which distributes the water into the ground, without further anxiety on the part of the owner.

The contents of the bathtub and basin should never be allowed to discharge into the street gutter. Epidemics of contagious diseases have been traced to this cause, the contagion being carried by children who had been playing in the gutter.

Water from sink and butler's pantry and laundry can not be disposed of by a simple stone drain. It is so heavily laden with grease and soap that in a very short time the earth around the drain, which should absorb the water, becomes coated with an impenetrable deposit and the water sets back or forces its way out on top of the ground if the decline is steep. To dispose of such waste, the impervious pipe which carries it must be divided at the end into at least three branches, discharging fully twenty feet from each other, the contents emptying upon the surface of the ground. Only one of these mouths can be in use at one time. The period of its use varies with the heat of the season. When the mouth is closed the earth into which the waste has run is spaded or plowed. The ground thus left to dry out will recover its absorbent powers and be ready for use when its turn comes again. Soil so treated would be an ever-continuing supply for the fruit and vegetable garden of rich and fruitful loam.

The drain should be carefully watched, and the outlet

frequently changed, for of all waste from the house this is really the most unpleasant if not the most dangerous. It is certainly the most malodorous, as anyone can testify who has driven during the hot August days through the farming district of Pennsylvania, where open drains are the rule—the wonder that the dwellers in the house can stand the stench being only equaled by surprise that such thrifty people could neglect so valuable a fertilizer when they could be both more comfortable and better off with a little care.

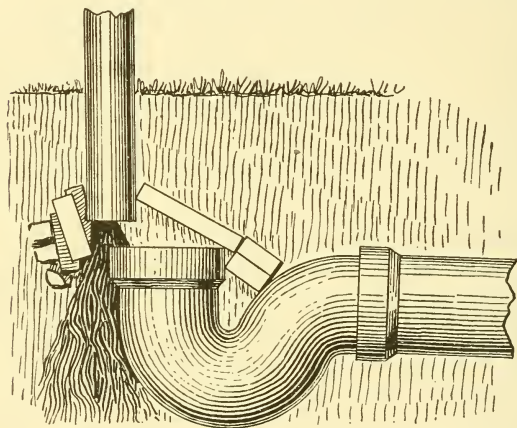
This modification of the distribution system should be put in use where earth-closets are used. No liquid drainage can be turned into an earth-closet without interfering with its efficacy; it is the dry earth which disinfects. Slops may be poured into a hopper connecting with the outlet from the kitchen. This must be trapped.

The treatment of the discharge from the water-closet is on a similar plan, except that it is first accumulated into a tight flush cesspool, which discharges by siphonage as in the distribution plan. This gives the contents time to sink into the ground and be absorbed between the discharges. This system should also have several mouths, and the earth be plowed spring and fall. In the treatment of sewage in the country we should have our neighbor's interest in our minds as well as our own, and quite as scrupulously refrain from polluting his water supply as our own. If we are privileged to be the dwellers on the hilltop, there is always a possibility of injuring the water supply of another dwelling further down. Such a system as we have described has the advantage of being entirely in sight, and quite under control.

It may be here remarked that in the country even more than in the city must care be taken to avoid the introduction of all matter into the drainage system which is foreign to its purpose. Especially must the use of all but the regular water-closet paper be tabooed. This in its passage down the pipe practically disappears. Newspaper does not. Not even the earth-closet can be considered a receptacle for trash. That must be otherwise disposed of.

WHAT MAY HAPPEN

All drainage in a country house designed for occupancy in the winter must be carried down into the ground below the frost line. Earthenware pipes are not safe for winter use, although for drainage under the ground, during the summer, properly caulked and cemented, they are suitable. They are apt to break from extra pressure, however, and must never be run through a basement wall unless protected



A Typical Bad Connection

by an arch or a lateral slab of stone. A case which came recently under our own observation will serve to point this as well as several other morals.

When it became necessary to remodel a farmhouse lately it was observed that the rear wall of the cellar seemed insecure. It was torn down to rebuild, revealing the fact that earthenware pipe of the drain had broken and all the liquid which had been poured down it had run out on the ground, evidently for some length of time, for the earth had been

washed out, leaving a hole of considerable depth. Through this the water had leached into the ground. It was discovered that the family during the winters had not made use of the outdoor privy, but had emptied all kinds of slops into this drain. When investigated and cleaned there were near three barrels of nightsoil taken out of this pit, showing that this had been the practice for more than one season. The drain pipe when taken up was found to be filled throughout its length with an impenetrable papier-maché composed of hair and paper. The well was fifteen feet from this broken drain, and only an active imagination can picture the state of the water therein, for not only had any amount of liquid leached into it, but it had received direct contributions from the pipe of the kitchen sink, whose sections had parted company in the sinking of the wall. It was said that the outgoing tenants had complained of the well and had always fetched their drinking water from another at some distance from the house. This fact alone probably had saved the family from serious illnesses. They were much subject to minor manifestations of ill-health, however, particularly the wife, who was busy in the house most of the time, and suffered horribly from headaches.

This was not an ignorant family. They had had hygiene preached at them and understood its needs. They were careless, and the conditions were not such as made hygiene easy. The stopped-up pipe would have sent the drainage back into the cellar in any case had not the frost or the weight of the wall made the escape easy. Of course the use of the drain as a soil pipe would not have been excusable even had not circumstances been as they were. The arrangements were as bad as could be in the first place, and aggravated by want of inspection. The first act of the new tenant was to put in a furnace which would make possible a modified system of plumbing and permit a water-closet. His second, to so arrange the drainage that it could be easily inspected and kept in order. It goes without saying that a new source of water supply was imperative.

Only constant inspection can secure safety in any matter of health. Constant supervision it becomes when we are served by people ignorant of sanitary and chemical laws. It was in another country house that during the summer a most annoying and unpleasant odor rising from the laundry filled the house. When the floor was lifted it was found that the entire contents of the drain had been washing under it for some time. It was from the date of the spring cleaning, in fact, for the drain was hermetically sealed by a kind of concrete formed of the combination of the grease which had been in the pipe and the lime from the whitewash the country painters had emptied down it. Whether they erred from carelessness, or actually thought they were doing yeoman service as disinfectors, is not known. Yet had they possessed accurate knowledge of the properties of the materials with which they were working and had they made conscientious use of such knowledge, it would have been of decided advantage to the owners of the house.

It was the experience of this family which pointed another moral in house drainage. The drain was a long one and, though the position of the cesspool was known, the course of the pipe was not. When taken up for cleansing, it was found that over it had been built a small cottage whose chimney was directly above the drain. This had cracked the pipe by its weight so that more or less of the contents had escaped beneath the cottage. Every country house should have a map of its sewer system, and that map should be kept where it can be found when wanted. Had there been such a map in this instance, the cottage could have been set a little to one side and the break in the pipe avoided.

DISPOSAL OF GARBAGE

One of the privileges of living in a town is shifting the responsibility of the disposal of ashes and garbage on to the officials provided by the community. The papers neatly rolled up, the ashes put in the can, and the waste food in its

own receptacle, there is nothing more for the householder to do except to complain of bad service.

In the country the matter is much more serious. It is simplified when there are pigs and chickens to eat the refuse from the kitchen. With city-bred maids, however, there is always a struggle to keep tomato cans and other indigestible articles out of the pig pail.

The country house requires four separate receptacles for waste. A galvanized iron pail strengthened by upright bars of wood for the kitchen refuse, one for the ashes, a barrel for papers and the rejected contents of the vases, and one for broken crockery, rejected kettles, tin cans, and the like.

The pail for the kitchen waste should be in duplicate, which may be filled and emptied on alternate days. Into this should go nothing but what can be eaten by the pigs. No cans, bottles, nor the contents of the dustpan. When emptied it should be well rinsed with water and scrubbed with an old broom, and left with clean water in it until the next day.

The barrel for consumable trash is the most important aid to neat housekeeping. This should be emptied by means of a semi-weekly bonfire. The kitchen range is not the place to consume bouquets past their beauty. The sudden lowering of the heat through the wet, sodden mass has ruined more than one baking of cake and tried more than one cook's temper. After a day or two in the barrel they are dry enough for the fire made by the accumulated papers to dispose of them. It is in this barrel that the sweepings belong.

When both coal and wood are burned there should be two ash pails. There is nothing better for lawns than a top dressing of wood ashes. These are also invaluable scattered about the currant bushes, for they are not only an excellent fertilizer, but also useful in discouraging the currant worm.

Coal ashes make very good paths when used alone. They are a fine substratum for the more ornamental gravel, and extremely useful in mending the roads after the spring wash-outs. If ashes are allowed to accumulate they should be kept in barrels to save handling.

When there are neither pigs nor chickens nor a friendly farmer who desires the swill, there remains for the householder but two ways of disposing of it: the vegetable garden and the bonfire. Well saturated with kerosene, the garbage will consume, although it reeks in the consumption. The vegetable garden is a much more economical manner of putting it out of the way. There is no better fertilizer when its chemical constituents are set free, and all disagreeable odor is soon absorbed by the earth. The best way is to dig a trench the length of the garden in the spring, and cover in the portion each day where the contents of the pail have been thrown. A little lime should be scattered occasionally to prevent the earth from souring.

But what is to be done with the broken glass, china, tin cans, and pots? In communities there must be some concerted action in this respect. The lonely householder must solve the problem for himself. All methods which make the landscape hideous must be eschewed. One woman in desperation had a deep hole dug in the pasture, and heaped the collection of years into it. Another, more clever, used her pots and pans and bits of glass as filling for a stone drain, spreading above them all the musty bits of burlaps accumulated from furniture wrappings, all the trodden-out bits of carpet which the house could furnish, to prevent the earth from sinking down and clogging the flow. It was a saving in the time required to haul the stone, and a much appreciated clearance of the cellar and attic. This was a drain used simply to reduce the quantity of water in the ground. Drains intended to carry off slops from the house can not be so treated.

IX

THE WATER SUPPLY

Sources of Supply—Rivers and Watersheds—Wells—Cisterns—Care of Water—Service Pipes—Tests for Water—Filters—Tanks and Water Power

ALL departments of housekeeping and homemaking are important, and all depend upon each other. The most important of all is the water supply. The most admirably built house in the world with the most perfect cellar and most irreproachable plumbing system is no safeguard against disease unless the water supply be pure and wholesome. It should not only be pure, it should also be plentiful. Of all exasperations in housekeeping there is not one equal to that afforded by a deficient supply of water. It is dangerous as well, for it is a check and hindrance in the matter of purification from the laundry up to the bathtub and down again to the kitchen sink.

SOURCES OF SUPPLY

The different sources of supply are characterized as follows:

Wholesome waters...	{ Spring
	{ Deep well
	{ Upland surface
Suspicious.....	{ Stored rain water
	{ Water from cultivated lands
Dangerous.....	{ River water
	{ Shallow wells

To the three considered wholesome, rain water may be added under certain conditions.

All water which we use comes to us originally from the clouds and sinks through the earth until it collects in sufficient amount, the fall of the land being favorable, to appear

on the surface as a spring. Sometimes these springs are outlets from underground streams which come from a great distance. Sometimes they are not merely the result of the collection of water which has fallen on the earth, but that which has escaped from some large stream or river into an underground stratum. It is said that only about half the water which runs into a river runs out of its mouth, the remainder disappearing into the earth, to reappear elsewhere in the dip and rise of strata of the earth, reappearing often on the tops of hills and mountains. In the course of the stream through the earth many substances are dissolved and become component parts of the water. Soft water, like rain water, which has a large proportion of dissolved oxygen in it, is peculiarly liable to absorb and dissolve chemical substances. Sometimes the combinations are harmless, sometimes harmful. The water dissolves some forms of arsenic as readily as lime, and nitrates with as much ease as magnesia. It will also, if it has passed through ground infected with sewage, be the home of germs innumerable.

Good water—that is, water suitable for drinking—must be as free from compounds as possible. It must carry with it neither nitrates nor germs. This debars the use of the water of rivers into which drainage runs, and of shallow wells which are open to contamination from the surface.

For use in the house water should be soft. Hardness of water is as a rule due to the presence of compounds of lime or magnesia. A moderately hard water is perfectly suitable for drinking, but it is undesirable in the kitchen or laundry. If common soap is added to hard water it seems to curdle. No permanent froth or lather is formed until by the action of the soap on the lime or magnesia, or the mutual action of the soap and lime and magnesia, they are converted into a lime or magnesia soap, the insoluble substance or curd just alluded to. Soap added after that point is available for washing, but the water is not so efficient a detergent as if it were soft in the first place. It is customary to add quantities of

soda or pearline to hard water to soften it. In Europe eau de Javelle is used, a combination of potash and ammonia. A lather is possible with such agents, but the overabundance of alkaline matter attacks and destroys the fabrics.

Hard water may be softened by boiling, the lime and magnesia being deposited in the kettle, but except for cooking this course adds too much to the work of the house to be feasible. Hard water should never be used in an engine boiler. The deposit will in a short time so fill the interior as to make the engine useless.

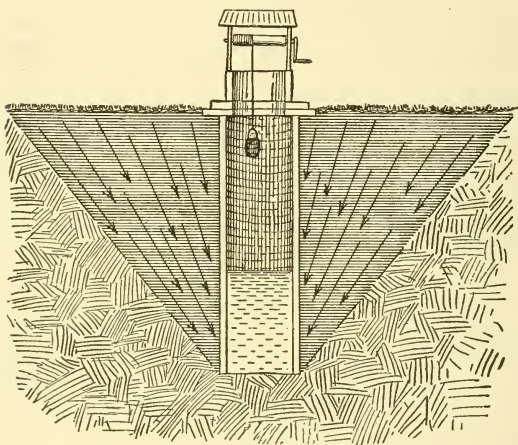
There is practically little option for the city dweller to exercise concerning the water which is used in the house. He must take what the town provides. He can choose what he will drink, however, and if he does not supply himself with water bottled at a spring noted for its purity, he may have that furnished by the town boiled and filtered. Of only one city in the world can it be said that its water supply is absolutely pure. Vienna is blessed with an ample amount of spring water, which is stored in a cavern, and is living water when delivered to the consumers.

RIVERS AND WATERSHEDS

Rivers on whose banks are towns and villages are no longer considered a safe source of water supply. Mountain streams are, but if inhabited the watershed is more or less under suspicion. Where human beings live there is always ground for doubt as to the purity of the streams or lakes. So little is this understood that it is common for the edge of a lake from which a town draws its water supply to be surrounded by summer places. In one case arrangements have been made to bring water from a smaller lake further up in the mountains to keep the original lake full, "because it was so unhealthy when the water was low." There are some notable exceptions. The little community of Williamstown in Massachusetts owns its watershed and permits no building, hunting or trespassing of any kind within its limits.

WELLS

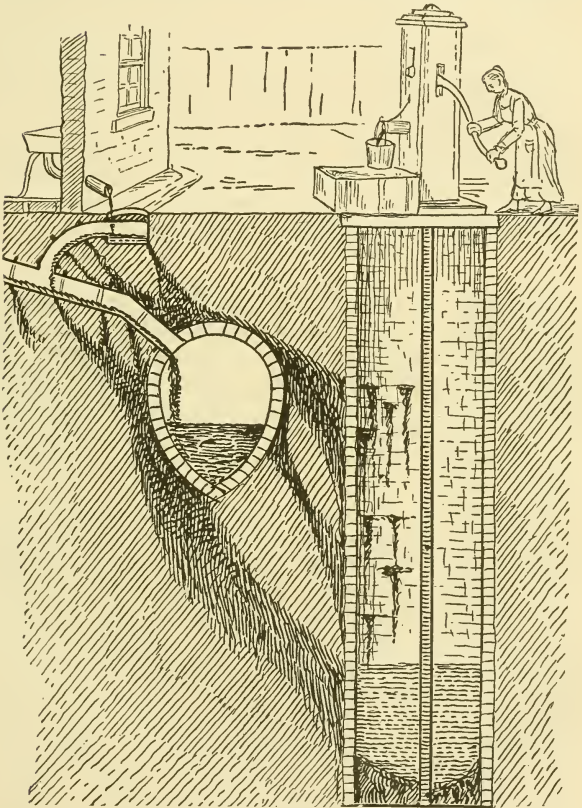
With the artesian or driven well one may feel comparatively safe. Also with the dug well whose spring is deep in the earth, but even in this case too much care can not be taken to keep the ground about it clean and free from contamination. The best well can be poisoned by the surface water which runs in. The same authority who pointed out the cone of pollution incident to the cesspool has also drawn attention to the fact that a well is liable to pollution from



Area of Pollution for a Well

the surface from an area whose radius is equal to the depth of the well, an inverted cone this time. This is not only natural filtration. It would surprise us very much and disgust us still more could we have a sectional view of the ground about our wells. We would find rat holes in abundance serving as conduits for rain water and other liquids which sink into the earth and more or less deposits of dark-colored earth evidencing a suspicious richness of soil due to various

causes. Too often there is direct connection from cesspool to well. All wells should be cemented inside to within a few



Possible Connection Between Cesspool and Well

feet of the bottom. The safest are those lined with the large tiles made for this purpose cemented together at the joining.

It would be advisable, too, to raise the edge of the curb a foot or two to prevent the water in thawing weather from running in over the top of the snow. Quite recently a family who had prided themselves on their sanitary earth closet and cemented well were horrified to find in the spring thaw, after a very snowy winter, a stream of water running from the melting banks of snow directly through the earth-closet and over the top of the snow into the well.

In all sandy localities, where cesspools are frequent, the ordinary wells are not to be trusted. The supply must either come from a distance where the conditions are different or recourse must be had to artesian or driven wells.

CISTERNS

Rain water is characterized as suspicious. It is also unpleasant when it comes from a shingled roof. Yet it is the sole source of supply in many parts of this country. If drawn from a slate roof the taste is agreeable. The danger of contamination from birds and dust is guarded against by means of an automatic cut-off, which permits the water to enter the cistern only when the roof has been thoroughly washed.

In the country, as we said in the chapter on drainage, it is advisable to store the rain water in cisterns for the use of the laundry and kitchen, especially when the water supply is hard. For this purpose a cement cistern should be built in the ground and furnished with a brick filter. The first wash of the rain must be disposed of as mentioned in the paragraph above, and the opening carefully guarded against the entrance of leaves or other matter. The gutters on the roof must be cleaned occasionally, particularly in the fall, when dead leaves are driven about by the wind. There must be a grating with a removable cover which catches all foreign matter. This should be cleaned after each rain. If this cistern is depended upon for the water supply it ought to be constructed in duplicate to allow of cleaning each at least once in three months without depriving the family of water.

In Oregon such cisterns are the sole source of water supply on the ranches. They are allowed to fill during the winter with the cold rains, the water remaining cool enough for drinking all summer.

Where there is dearth of good water and the ground space can be spared, a concrete floor with a cement finish, closely fenced off to keep animals and human beings from it, and frequently cleansed from dust, can be used to catch the rain water which is to be stored in an adjacent ground cistern. If the fall of the land will permit, this may be put higher than the house, thus securing a carriage of the water by gravity. This device is often used on islands and for lighthouses on rocky points.

The cut-off mentioned is simply a pipe whose contents are equal to the wash of the roof. The first flow of water in a rain runs into this pipe. When it is full a valve rises from the pressure of the water, and the succeeding rainfall passes over this valve into another pipe which connects with the cistern. The water in the first pipe can be let off through a faucet.

CARE OF WATER

There must be some care taken of water after it is brought into the house, to keep it pure. Drinking water should never stand in an open pail. It absorbs the poisons, gases, and solids from the air with great readiness. The water supply must have no connection whatever with the drainage system. Even the overflow, as we have already said, can not empty directly into waste or soil pipes. Most especially must the tanks used for flushing the water-closets be separated from the drinking supply. A severe case of diphtheria was traced to the use of water from a tank in the same room as the water-closet. No water which has stood uncovered in a bedroom overnight is fit to drink.

It is a matter of wise precaution to boil and filter well water in times of prolonged drought. It is when springs get low that those infected with microbes become dangerous. The human system can resist the action of disease bacilli if

not introduced in too great numbers at one time. When the well is low the proportion of organisms becomes alarming even for healthy people, while there is always danger from infection when the system is reduced and the vitality is low.

When there is any doubt of the purity of the water supply, too great care can not be used. In the epidemics in Ithaca and New Haven in 1904 the students were forbidden not only to drink water from the faucets, but also the use of lettuce, celery, and other salads which must be washed in the suspected water, and were particularly requested not to use the city water for brushing the teeth. Travelers in India relate that during the outbreak of cholera in 1904 it was the custom of Europeans to purchase, for cleaning the teeth, the soda-water distilled and charged by the Government. Of course no other water was ever used for drinking. In this connection it may be well to mention that the acid of lemons is fatal to typhoid germs. This fact should be remembered during typhoid epidemics.

SERVICE PIPES

At one time all service pipes were of lead. Lead pipes are still used in some cases. There is a decided advantage in the use of pipes of this metal, since they can be carried easily around curves and require no elbows. Unfortunately lead is extremely prone to form chemical union with various salts when subjected to the action of water containing such salts and the dissolved oxygen which is always present in water. The resulting compounds are as a rule active poisons to the human system. It is true that prominent English authorities claim that the danger is exaggerated, the pipes becoming in a very short time lined with protective coatings of lead compounds which are not soluble, so that after a short initial action corrosion practically ceases in a filled pipe. It seldom ceases entirely, and it is agreed by even the advocates of the use of lead pipes that water which has been standing in the pipes should never be used for drinking, nor water which has come through them hot for drinking or cooking.

New pipes demand much precaution. The water should

be allowed to run freely at intervals for days. In pipes which are alternately full and empty, those of pumps for example, the air supplies oxygen in larger quantities. Lead pipes should never be used in that case. Lead pipes tinned are perfectly safe. They are used for pumping beer and in soda-water fountains, but the expense is prohibitory for a large service.

Wrought-iron pipes enameled are much superior to lead in point of healthfulness. They require elbows and well-made joints, but, if the iron is well protected, last indefinitely. The enamel is generally a preparation of coal tar with or without linseed oil.

Galvanized iron—that is, iron protected by a zinc coating—is also eminently safe as a conductor of water. The zinc coating adheres firmly to the iron and to a certain extent penetrates it. It is considered to protect the iron by virtue of a galvanic action between the two metals when exposed to the action of water. It is not a permanent protection, however. Corrosion begins as soon as the pipes are immersed in the water. The effect is on the zinc alone at first, if the zinc coating is thorough. Later, when the zinc disappears, it is the iron which is affected, and rust ensues. The advantage of the galvanized iron lies in the cheapness and in the fact that compounds of zinc do not seem harmful. Iron rust is not dangerous, but it is unpleasant to the taste and renders the water unsightly and unfit for culinary purposes and in the laundry. The process is slow, however. To our knowledge a galvanized iron pipe was used for pumping for twenty years before the iron was sufficiently corroded to give the water a slight taste. The water was still free from color when the pipe was changed.

TESTS FOR WATER

For the mineral constituents of water we must go to the analyzing chemist. It is well to send him a gallon or more. The bottle or demijohn must be perfectly clean. It must have a glass stopper. To make the test perfect bottle and stopper

should be well washed in distilled water and rinsed at least three times with the water to be analyzed before the bottle is filled. The stopper should then be put in and sealed.

There are some tests for sewage pollution which can be made at home.

HEISCH'S TEST

Put half a pint of the water into a clean, colorless, glass-stoppered bottle, add half a teaspoon of white sugar, shake until the sugar is dissolved, and leave the bottle freely exposed to the light in a warm room for a week or ten days. If the water becomes turbid, it is open to suspicion of sewage contamination; if it remains clear, it is probably safe.

CHURCH'S TESTS

"1. Boil one quart of the water to be tested in a porcelain dish, and then heat the dry residue hotter and hotter. If the original residue is white and powdery in appearance, that is so far a good sign; but if it is partly white and partly yellowish or greenish, and especially if there are gum-like stains around the residue, then, on heating these parts of the residue, we shall probably see them darken, fuse, and burn away in part, giving out fumes having a disagreeable smell. If the blackening is considerable, much organic matter is present, but if the smell is offensive (like burned feathers) then it is certain that the organic matter is of animal origin, and is therefore more likely to be unwholesome or even poisonous.

"2. If water contains substances derived from the decay of animal or vegetable matters, such as those in sewage and manure and the refuse of plants, then it is found that such water will destroy the beautiful purple color of a chemical substance called permanganate of potash. The reason for this is as follows: The decaying organic matter of the water attracts oxygen strongly when it is presented in certain states or forms. Now, a solution of the above permanganate contains much oxygen just in the right state to be attracted and removed. By its removal from the permanganate the com-

position of that substance is altered and its color destroyed. The more organic matter in the water, the more the permanganate will be decolorized. The test may be thus applied: Fill a clean white teacup with the water to be tested. Add about sixty drops of weak sulphuric acid; stir with a clean slip of window glass. Now put in enough of a weak solution of permanganate of potash to render the water a rich-rose-color. Cover the cup with a clean glass plate. Now, if there be much organic matter in the water, the color will go in a few minutes, and more permanganate may be added and still lose its color. It must be recollected, in using this test, that peaty matter and iron salts, which are not necessarily unwholesome, give the same results.

"3. Nearly fill a clean tumbler with water, and then add twenty drops of nitric acid and five of a solution of nitrate of silver (lunar caustic), or else a small crystal of that substance. Stir with a clean slip of glass, and if there is more than a slight bluish cloudiness, if there is a solid curdy substance found, then there is too much common salt in the water. It may be said: 'What harm is there in common salt?' We answer: 'None in common salt as such, but only in common salt as evidence of some kinds of pollution.' We will explain. Common salt (chloride of sodium) does not occur in rain water or pure well water, except to the extent of a little over a grain per gallon. Of course there is more in waters from salt-bearing rocks and in waters near the sea. But generally, at all events in a chalk or limestone district, where common salt is found in any quantity exceeding one and one-half grains per gallon, with nitrate of silver, the salt is derived from sewage; in other words, from the salt consumed in human food and voided chiefly with the urine. If a water is found to contain both organic matter and common salt, it is probably contaminated by house or town sewage. If the organic matter be abundant, but accompanied by a smaller quantity of common salt, then the source of pollution is rather the excrement of farm animals than of man, or it may arise merely from vegetable refuse."

FILTERS

Water containing organic matter can be purified by the addition of alum or oak chips. These coagulate the albuminous substances in the water, and the precipitate carries down other impurities. Water taken from marshy lands, ponds, or rivers should be so treated. Eight grains of alum to a gallon of water, or a handful of oak chips to two gallons, is the proper proportion. The water should be filtered when strained.

There are various kinds of filters on the market, all good if properly cared for. It must be remembered that the filter which catches the organisms becomes a breeding-bed for them as soon as the water is removed and the air can reach it. It should be cleansed daily by water which has been filtered and boiled.

Small flannel bags tied on the kitchen faucets and changed each day are excellent as strainers. They can not be used long without being boiled, however, without becoming more dangerous than useful.

TANKS AND WATER POWER

If there is no means of supplying the house with water from a public service, it is earnestly advised to have a tank in the house and to pump from the well or cistern. In this case the foundations of the house must be specially strengthened to sustain the weight. There are various means by which the water can be raised. Wind power is the cheapest, but is uncertain and the apparatus unsightly. A small kerosene engine is perhaps the best. Its first cost is not prohibitive; one can be bought for about a hundred dollars, and its fuel is cheap. It need be run only part of the day, and its power can be applied to other things—sawing, for instance, or the sewing machine. Hand power is to be depended upon only in the case of a very small family or simply for the flushing tank for the water-closet.

X

LIGHTING

Gas—Gas Poisoning—The Care of Fixtures—To Read Gas Meters—Kerosene—Tests
—The Care of Lamps—Time Versus Money—Candles

IT is universally admitted that electricity is the artificial light of the future. Its clearness, its steadiness, its lack of heat, the fact that it robs the air of no oxygen, make it perfect as an illuminating medium. At present its cost when supplied from a central station is excessive, and the conditions necessary for its production are prohibitory except in large establishments which require the use of an engine for other purposes. It is also as yet extremely tricky, and if we would not be left in the dark every now and then, some other means of light is imperative. No house is prepared for emergencies unless piped for gas as well as wired for electricity. Gas is also most valuable as a fuel.

GAS

As compared to other illuminating mediums, gas is far superior to all but electricity in cleanliness and ease of management, and it vitiates the air much less. It has been estimated that an ordinary gas-jet will consume as much air as two people and a kerosene lamp as much as four. Sperm candles, in quantity sufficient to produce as much light, use more air than kerosene, wax candles yet more, and tallow nearly four times as much. That is to say, tallow candles giving as much light as an ordinary gas-jet will consume sixteen times as much air as the gas.

For a room intended for varied employments, the light should be as evenly diffused as possible. This is done by means of a central chandelier. The strain on the eyes is much lessened if there is not an alternation from dark to light. Lights for reading should be at the side of the room a little

above the reader's head and shaded to cast the light on the book. For sewing the light should be as near the work as possible, and also be shaded. A dining-room is better lighted with side fixtures than from a central chandelier. The light directly overhead is trying and very unbecoming. A shaded drop-light is better, but much in the way. Many people do not use gas in the dining-room at all, preferring the soft effect of candles with colored shades.

GAS POISONING

The greatest care should be taken to avoid the escape of gas in the house and dangers of its escape should be firmly impressed upon the mind of every member of the household. We no longer blow out the gas, truly, but there is still a woful amount of ignorance on the subject, which results in a frightful sacrifice of life. There is only one mixture which it is safe to breathe. This is air, consisting of one part of oxygen to four of nitrogen. It is possible to exist in an atmosphere with an admixture of other gases, but in so far as these preponderate in just so far do we cease to live.

The danger of gas poisoning has increased enormously since the use of water gas. This is a gas cheaper than coal gas and with higher candle power. The difference in the cost of production enabled the gas companies to compete on better terms with the electric companies. It is infinitely more deadly than coal gas, however, containing about thirty per cent of carbon monoxide, the most subtle and deadly blood poison known. Coal gas carries usually only between six and seven per cent of carbon monoxide.

It is not only the death of the sufferer which is to be feared. The New York "Times," commenting on the three hundred and eighty-eight deaths in New York City during the year 1903 traced by the coroner to exposure to illuminating gas, of which only one hundred and thirty were suicides, says: "The number of deaths probably due to illuminating gas in New York which are accounted for on satisfactory certificates of physicians would swell the total to startling pro-

portions. The anæmic condition produced by exposure to a very little carbon monoxide in the air of living and sleeping rooms may not directly kill those not evidently asphyxiated, but it so lowers the vitality and impairs the powers of resistance that the victims are rendered susceptible to every contagion and infection to which they may be accidentally exposed."

The article concludes with a statement which contains a needed lesson for those who have not yet learned to appreciate the danger of the entrance of ground air into the house and the necessity for airproof cellars: "The smell of gas is a danger signal as significant as the rattle of a snake in the grass. It is most to be feared, however, in the odorless form in which it enters houses from leaks in buried mains or service pipes. Uncarbureted water gas, carrying about 45 per cent CO, is odorless; illuminating gas which has been filtered through the ground loses its odor-imparting additions—the naphtha vapors which render it luminous—and becomes a gas of nearly equal parts of hydrogen and carbon monoxide. It is by far the most dangerous constituent of what is called sewer gas, it accounts for the general prevalence of anæmic conditions among the poorly housed of our city's population."

THE CARE OF FIXTURES

The pipes are always tested with water before the plastering is put on. Gas does not corrode the pipes, and if leaks occur, unless there has been some strain on a pipe which has started a coupling, the trouble will be in the fixtures. These should be inspected frequently. The gas-cock should turn easily and the stop be firm. If the turn is too hard the gas-cock will frequently not be turned the whole way back. Gas-cocks which turn all the way round are very dangerous. It is nearly impossible to guess in the dark at the exact point at which the gas-cock is at right angles with the fixture. This revolving gas-cock is a trouble very easily remedied as a rule, for it is seldom broken or even worn. It has merely dropped a little in the pipe, and the application of a screwdriver to the

screw-head just over it will bring it back into place. If it does not, a new fixture is urgently needed.

Unconsumed gas frequently escapes during combustion. This is the case when the well-known and nerve-trying whistling sound is heard. It may be caused by too great pressure. To test the pressure and gauge the amount of unconsumed gas and common air which escapes when the gas is lighted, all the burners of the house should be lighted and turned up to the usual height. One person at the meter then turns down the tap until signaled that the flame is diminishing. With the tap left at that point all gas which comes through the pipe will be consumed, and there will always be a diminution in the gas bills. One man reports a decrease of fifty per cent.

If the flame divides there is need of a new tip. Metal tips are to be preferred, though the lava tips last longer. They are liable, however, to crack and clog.

There have been various inventions to ensure the entire consumption of the gas which comes from the pipe when lighted. The Welsbach and similar burners are excellent, and give a peculiarly brilliant white light. They are of especial value where gasoline is used, that being richer than the water gas and needing more oxygen for perfect consumption. They require some care in their use, but if the directions which accompany them are faithfully observed there is little danger of clogged mantles and cracked chimneys.

A gas stove or a drop-light should always be turned off at the fixture, not at the burner, and the tube should be detached frequently and aired. A rubber tube will soon have a disagreeable odor if the gas is left in it.

It is admitted that there is greater waste in turning the gas out and lighting it again, if this must occur often, than in turning it low and allowing it to burn between times. Gas should never be turned low, however, when there is a draught in the room. It should not be allowed to burn near drapery, especially if there is a strong draught when the door is opened.

Every person in the house should know where the gas is turned on and off for the house. It is wise to have cut-offs for the different parts of the house. In case of accident in one part there would still be light in the other. This is especially advised where gas is used exclusively for fuel.

TO READ GAS METERS

To the novice in homemaking the following instructions in the method of reading gas-meters may be useful. It is one of those things so simple when one knows how that it seems impossible for any one to be ignorant in the matter, but which yet may puzzle the perplexed housewife with a mind on other things and who has not yet learned how. There is some satisfaction in keeping tab on the meter, prone as we are to suspicion of the gas man and his notebook. We may know, if not how much is used, how much is recorded, and if the amount is out of proportion for the gas actually consumed, we have a right to demand a change of meters. Meters are frequently defective. One when watched was found to cheat the consumer of twenty per cent of the gas registered. When the unit index reached eight hundred, the other went up to a thousand, thus increasing the registration one-fifth more than was normal.

Meters have three dials, marked 100,000 feet, 10,000 feet, and 1,000 feet. Beginning with the first, that on the left, we follow indicator around the dial until we note the figure it has passed, and set this down as the first figure of reading.

We do the same with the second dial, whose figures, it must be noted, are arranged in opposite order from those on first and third dials, and whose indicator therefore passes around in opposite direction. This gives the second figure of reading.

Lastly, we note the figure that the indicator has passed on third dial.

These figures are, say, 6, 5, and 3. We add two naughts, and have 65,300 as the reading. From this we subtract the

figures marked "Present State of Meter" on last bill. We will suppose them to be 49,700.

$$\begin{array}{r} 65,300 \\ 49,700 \\ \hline 15,600 \end{array}$$

Fifteen thousand six hundred is the number of feet of gas used during the current month.

KEROSENE

Next in popularity to gas as a means of illumination is kerosene. It is much more troublesome to care for, but in spite of the labor it entails it will always be the favorite light for reading and working, on account of its steady yellow flame. It is a good deal cheaper than gas, also, and will be used by many for economy's sake even when gas is accessible.

It has its own dangers. While with gas it is our lives and health which we must guard from poison, with kerosene it is our persons and our property which must be shielded from the chance of combustion. Carelessness and ignorance of its properties on one side and greed and evasion of the law on the other place us and our goods often in peril.

It can not be too often repeated that it is not the liquid in our oil lamps which we burn, but the gas rising from it, which is set free by the heat of the burning wick, becoming incandescent by means of the oxygen it consumes from the air. It is gas quite as much as that which escapes from the open burner of the chandelier.

Kerosene is one of the products of coal oil, standing midway between the very volatile products, naphtha, gasoline, etc., which are inflammable at a very low heat, and paraffine, which has a high specific gravity, and is, in fact, a semi-solid and needs a high temperature to consume it. It is easy to see that the nearer the kerosene of commerce approaches to naphtha and the allied products, the more likelihood will there be of explosions from gases generated by heat and rendered explosive by mixture with the air.

It may be well to point out the difference between the inflammable and explosive qualities of these products. These vapors are inflammable; that is, they will burn if ignited in the air. Such incandescence is perfectly harmless when the flame is at the point of emission from a burner or wick. They are explosive when mixed with air, for then, when the flame is supplied, the ignition is sudden and of the whole mass, which consumes any object near. The explosion of the kerosene can in the hands of the careless servant is an example. It is the vapor between the can and the fire which ignites, and which sets fire to the liquid in the can. Yet wood soaked in kerosene is perfectly safe to use. Many people saturate porous bricks in kerosene as kindling material for open fires. There is not the least danger. The flame is at the point of emission, and the vapor is not mixed with air.

Paraffine gives off its gas only at a high heat, and is eminently non-explosive. Its solidity, however, renders it a bad medium for illumination in an ordinary lamp. It is less sensitive to capillary attraction and the heat of the flame does not suffice to vaporize it sufficiently to permit of consumption at the same rate as the more volatile products of coal oil. But it is a temptation for the manufacturer to include as much of the naphtha and paraffine products in the kerosene as possible, for they are both much less in value.

The heat of the flame has an appreciable effect on the lamp and its contents. A lamp which has been burning an hour becomes very hot, especially if it be of dark metal and has a shade which casts the heat downward. The gun-metal lamps once so popular become in a little time so hot that it is impossible to touch the top with the finger without a decided scorching of the skin. This heat has a decided vaporizing action on the liquid within, but the pressure is seldom sufficient to burst the lamp. The danger of explosion within the lamp lies in the chance that this vapor will mix with the air in the action of a flame running down the wick, if the oil is not of high grade.

The test in some States is only 100° F. That is to say,

only that oil is allowed to be sold which requires more than a temperature of 100° F. to give off vapors which will ignite. The only real safety is to use an oil which will not give off inflammable vapor at any temperature which will be reached under ordinary circumstances. Oil which could be heated to 140° F. without yielding this vapor would not take fire even if the lamp were broken and the oil spilled. It would only burn at the wick, where there is heat.

TESTS

To test oil, fill a cup with cold water a quarter full. Put a thermometer in this, and add boiling water until the mercury stands at 110° F. Then take out the thermometer and pour a couple of spoons of kerosene into the cup. With a lighted taper pass the flame over the oil. If it ignites it is unsafe, and must not be used. It must stand a test of at least 130° F. It should be noted that there is absolutely no worth in the quack mixtures sold purporting to render oil less explosive. The naphtha vapors can not be eliminated by any chemical process.

To test for paraffine expose the oil to a temperature below zero, and strain. If there is any tendency to solidify there is an excess of paraffine present and the full complement of light for the oil consumed is reduced. When such oil is used there will be clogged wicks and unpleasant odors.

Lamps must be filled frequently to prevent any vapor from forming in the reservoir. Even an oil which flashes at 130° F. if left in small quantity in a lamp will vaporize sufficiently to explode if it should come in contact with the flame when mixed with air. Moreover, the higher the flame from the surface of the oil, the less light is given for equal volumes of oil burned. The unpleasant smell peculiar to a lamp in which the oil is low is this vaporized oil, which the flame has not been able to consume. The wick has furnished more than the heat will burn. So also a lamp should not be turned low. The only saving is in the amount of heat given off. As much oil is used, but only part consumed.

Hence we gather that the important part of the lamp is

the amount of combustion which it is possible to produce. This depends upon the amount of air which we can supply. The round burners of the Rochester type bring up the air to the inside of the wick, and make a very high rate of combustion possible. The duplex burner, consisting of two flat wicks side by side, also allow for air on both sides of the wick.

The wick should be soft and of rather loose mesh. It should fill the burner, but not too tightly. If too small or too thin there may be a chance for the flame to run down into the lamp and cause an explosion.

THE CARE OF LAMPS

For a good light we need clean burners, clean wicks, and clean chimneys. Chimneys must be washed and carefully dried with a soft cloth. This should be done early in the day to give the glass chance to dry thoroughly. It is often recommended to boil old wicks in soda and water to freshen them. Our own experience is that an old wick is an absolutely useless article. Boiling will take the oil out, but it leaves the cotton hard, and the wick will not fill the burner properly. An occasional new wick is better. Wicks should never be allowed to become too short. In case of necessity a piece of another wick can be sewed on to bring the cotton down into the bottom of the oil and increase the area of capillary attraction, but this is only an expedient. The result is never so satisfactory as when a wick in one piece is used.

The wick should be smooth and even across the top, dipping a little at the corners when it is flat. One often hears that a wick should never be cut, but rubbed. This is perhaps the worst advice that could be given, and produces more smoky chimneys than any other practice. Small particles of the fibre are sure to be pulled up and cause an uneven flame. The wick should be turned up and the charred portion carefully trimmed with sharp scissors, and lighted, to ensure the evenness of the flame. It should then be turned down and the burner wiped inside and out to prevent all particles of the charred cotton from interfering with the flame. If in a

student or Rochester lamp, properly trimmed, the wick is uneven when raised, the trouble lies in the lower part of the burner. This has become rough with the action of the oil. The burner must be taken out, well washed with boiling water and soda, and then polished with sapolio. There should also be a new wick to ensure smoothness of running.

Every lamp should have its extinguisher. If there is none it must be extinguished by blowing across the chimney after the wick has been lowered part way, never down the chimney. Only small lamps should be carried around the house. The "packed" lamps, *i. e.*, those which are filled with a loose, soft wick saturated with oil and have no liquid, are the most safe. Student lamps in particular should be moved with care; never, if lighted; and always with the reservoir upright. If inclined toward the burner it will cause the oil to overflow.

The lamp should be heavy enough to ensure its stability. It should have no separate opening for filling. There is always a chance for the oil to work out from this opening, creating an evil odor in vaporizing, and it is a temptation for the ignorant or careless to fill the lamp while burning.

It must be remembered that capillary attraction is working day and night, and it is not seldom that we find lamps filled in the morning very greasy around the top at night. One which has been filled for a day or two and not used will be covered with oil. This must be wiped off before using, or there will be that very unpleasant odor of vaporized but unconsumed oil before mentioned, extremely offensive to delicate sense of smell.

We may all of us have seen the time when we could sympathize with the woman "who had lamps because they were pretty, but never used them, because they smelt." As a matter of fact a lamp need never be offensive if it is properly taken care of and supplied with good kerosene. It is only the unconsumed vapor which is unpleasantly odorous, as we have said. When a lamp smells, therefore, either it is not well cared for; has too little oil in it; has oil on it, or is filled

with oil which gives out too much vapor for the flame. Such oil is dangerous.

When lamps are first lighted, there is less oil brought up than when there is heat in the burner. The current of air also is stronger after the flame has been burning for a few moments. The wick should therefore never be turned up to its fullest capacity at first lighting. A low flame, too, gives the chimney a chance to heat gradually, and if damp to dry thoroughly before the full heat of the incandescence reaches it.

The danger of leaving gas-jets lighted near drapery has been pointed out. It is even more dangerous to leave lamps where any fabric can be blown across the chimney. In case of ignition the chimney will break from excess of heat, and bad fires often ensue. Shades which depend from the chimney itself are unsafe. If put on a heated chimney, the difference in temperature will break the glass and cause the shade to take fire if of combustible material. All silk, paper, or muslin shades should be protected at the neck by an asbestos or mica collar. It is unusual to find a silk shade not so protected which after a few weeks' use does not show a scorched ruffle.

TIME VERSUS MONEY

Many people in the city burn kerosene in their living rooms for the beauty of its light, and some use it altogether on account of its cheapness. It is cheap only in its immediate outgo, however. The care of a set of lamps for an entire house means an added expense of time monthly for either mistress or maid, who could both of them use it to better purpose. In a house of fifteen rooms the care for the necessary lamps was a matter of from two or three hours daily; that is the better part of a morning or afternoon. In a large mansion by the seaside the installation of a gasoline plant reduced the work of the house by a services of one maid. In a country house which is inhabited all the year round, or which is occupied for six or seven months, the use of gasoline has decided advantages. A plant costs about a thousand dollars. This may seem a large addition to the outlay when it

is a four or five thousand dollar house which we build. Yet if we consider that forty dollars is the interest on that thousand dollars, and count the wages of a servant at fifteen dollars a month (a very low estimate), making no allowance for board, and putting the working day at ten hours, if she devoted two hours a day to the lamps at an expenditure of ten cents (five cents an hour), it would take only two hundred days to pay the interest, leaving the rest of the year to pay for the gasoline, less the cost of the kerosene which would otherwise be bought. At any ordinary rate of use there would be a money saving on the cost of the kerosene. The real saving would be in the time, however. When there are a number in the family and the service is limited, the saving of from one to two hours' time daily lifts a very appreciable weight of care and labor from the shoulders of those who must supplement the efforts of the maids by their own exertions. This is again a place where we save money by spending it.

A gasoline plant requires very little care. There is less danger of asphyxiation than from illuminating gas, since it carries a very much smaller percentage of carbon monoxide than the latter, and its very marked odor reveals the smallest leak. The vapor is very much more inflammable, however, and there should be no risks taken—every leaky burner should be attended to at once. If the machine is in the house, that part of the cellar should be shut off from the rest and never approached with a light, since it is possible that the liquid itself may run out. There should be also a cross draught possible, to permit of thorough airing in the day time, should a leak occur.

CANDLES

Candles are nowadays so much more a matter of decoration than use that it seems almost superfluous to speak seriously of them. The tallow candle is never found, and, except in very simple country houses or houses where simple habits are cherished, where the old bedroom candle still is used, paraffine and composition appear only on the dinner table. Even here

they are often replaced by small kerosene lamps which are in candle form. When used they are usually hidden in glass tubes supplied with a spring which raises the candle as it consumes. It is no longer considered safe to put the inflammable shade directly on the candle, as formerly. Wax candles are seldom seen except as the proper complement to decorative sconces, and are not expected to be burned.

Still, for carrying around the house, candles are much to be preferred to lamps. They should have candlesticks with very wide saucers, though, to keep the grease from flying. To clean a candlestick the deposit should never be dug out. The candlestick should be heated until this can be poured off, and then well cleansed with boiling water.

XI

MISCELLANEOUS HINTS ABOUT BUILDING

Cost of Materials—Cost of Building Per Square Foot—Paint—Economy of Wise Expenditure

COST OF MATERIALS

PLASTER and wood cost about the same as a wall covering. It is well to consider this when the question of a wainscot comes up.

Hard pine floors, including filling and varnishing, cost only about ten per cent more than those made of soft pine. This is far less than the filling or matting necessary to cover the soft wood.

Hard pine, maple and oak floorings cost about the same.

The very best material for floors is quartered oak. This costs twice as much as when sawed in the usual way, but it looks and wears much better.

The extra cost of the tar or asphalt covering for the outer cellar walls is about fifteen cents per square foot.

The expense of building in brick and stone is about the same, exclusive of the expense of hauling. Wood costs about ten per cent less.

The expense of shingles and clapboards as a covering material for a house is about the same. It takes three times as long to lay the shingles, however, and costs three times as much as to put the clapboards on.

The expense of tiling a bathroom or kitchen is about seventy-five cents a square foot.

The expense of hardwood finish is about twenty-five cents per square foot.

Plate glass costs about a third more than ordinary window glass.

The proportion of expense of the various departments of

building in a house costing \$5,000 would be: \$1,000 for masonry, \$3,000 for carpentry, \$1,000 for the other expenses, including plumbing and heating apparatus.

The proportion of expense for cupboards and presses for a five thousand dollar house would be about fifty dollars.

It would cost about fifty dollars to pipe such a house for gas.

The fittings for the gas, chandeliers, etc., could be bought for from one hundred to two hundred dollars.

Finishing the woodwork with paints or filling and varnish is nearly the same expense.

COST OF BUILDING PER SQUARE FOOT

If you wish to know roughly what kind of a house you can build for your money, that is a house with modern conveniences and well finished, with a good cellar and a fairly picturesque exterior, divide the sum by four. That will give you the number of square feet you may have on the ground plan. These can be arranged as desired.

That is to say, that the least expense of building a dwelling house averages about four dollars to the square foot of ground area. If we suppose a person to have two thousand dollars to spend on a house, he could have one whose ground plan would contain five hundred square feet; that is, a house 20 by 25 feet. To obtain a larger house, something must be conceded in the requirements. All monumental building is reckoned in cubic feet, because the proportions of height are so different. Dwelling houses must be in a certain proportion of height to look well and can be reckoned in square feet.

PAINT

Shingles should never be painted on the sides of the house. If left to themselves they weather in most attractive shades of gray. If a special tint is desired they should be stained by dipping into the stain. When making alterations on a shingled house which has been stained it is well to stain the shingles some months before they are required and allow them to

weather, spreading them on the ground or on the roof. Unstained shingles may be weathered to advantage also for alterations.

There is a prejudice against painted shingle roofs. The paint, however, certainly preserves the shingles and needs renewing only once in ten years or so. If the house is frame, with clapboards painted, the roof should also be painted in a contrasting color.

All new wood used should be inspected to discover knots. When these occur they should be shellacked.

Battened doors and window coverings should be painted.

Leaks in the roof can be stopped by driving squares of tin under the shingles at weak joints. The roofs of dormer windows or projections having but a slight projection should be tinned or very carefully flashed with tin.

Paint with too much oil in it will blister under a hot sun from the quantity of unabsorbed oil. If the wood is wet when it is applied it will also blister because the water in the wood prevents the absorption of the oil.

Lead paint can be used outside a house only. It needs the sun to keep its color. If used for the interior it will darken, the lead and oil forming an insoluble soap which grows darker and darker with time. Zinc paint is the proper thing for the inside of a house.

ECONOMY OF WISE EXPENDITURE

It may have been noticed that in this work much more stress has been laid upon how to spend money than how to save it. That is because experience has taught us that some saving is more ruinous than spending. When we build we should lay out our money not only so as to get the greatest return in comfort for it, but so as to avoid spending later for what is not comfort, but waste.

Therefore when we come to build let us remember these things:

A dry, air-proof cellar and good plumbing save illness, possible death, and doctors' bills.

A warm, well-built house saves coal, colds, and doctors' bills.

A water service saves health and work.

A gas service saves work.

And all save money.

These things mean the expenditure at a rough estimate of about four thousand dollars in addition to what it would cost to put up a badly built and badly equipped house. They also mean real money in the pocket. *But to prove this accurate accounts must be kept.* When the income is limited the money all goes one way or another. It is only the survey of the balance at the end of the year which tells us what the saving is and where applied. It is the worry of seeing one's money going out in ways from which there is no possible return, and pinching and scraping to get along in consequence, which discourages the American man of business and makes his wife feel herself an extravagance and the children an unnecessary burden. When, however, by a wise expenditure there can be money saved for the higher part of life and the time gained to enjoy it, life ceases to be a mere struggle and becomes the blessing it is meant to be.

PART II.—FURNISHING THE HOME

XII

FURNITURE

The Elements of Good Taste—Decoration—Machine-made Furniture—Fitness in Furniture—Furniture and History—Influence of Materials on Style—Furniture and the Home—Bedsteads—Home-made Furniture and Makeshifts

IT is when we come to furnishing that our limitations are wont to affect us most unkindly. There are few of us in such a financial condition that we can consult our wishes only. We are hampered by our purses and sometimes by our possessions. But, while the pleasures which the cultivation of our taste may give us through the apprehension of beauty in all its forms are myriad, its greatest triumph lies in the power conferred to evoke harmony and charm out of commonplace materials.

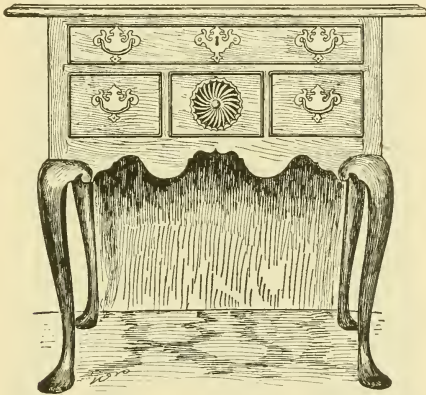
THE ELEMENTS OF GOOD TASTE

When we come to analyze taste we find that in its broadest definition it resolves into a sense of fitness and a sense of proportion. When we apply this to concrete objects fitness becomes the relation of an article to those with which it is associated; proportion the artistic application of the laws of weight and equilibrium on the one hand, and symmetry—that is, form and line—on the other. Combined with these and pertaining to both is a third requisite, a sense of color. The sense of fitness is acquired by familiarity with the manners and customs of cultured society; the sense of proportion and the sense of color, by training the eye.

The combination of vision with the reasoning process is perception. It is only by the cultivation of this perceptive faculty that the sense of beauty is developed. Very early in the study we discover that certain outlines give us pleasure which others

do not. This property we call grace. Grace comprehends both proportion and line; that is, shape. Proportion can be reduced to measure, but when we come to consider line we find it dominated by something which is not measure, but which for lack of a better word we call *feeling*. It is the distinction between law and poetry.

A well-known example is the outline of the Greek molding known as the "cyma." This is formed of two segments of an ellipse, put together in reverse, whose curves are a matter of



A Lowboy

the eye, not of the compass. The Greek cyma is a most delicate, illusive, suggestive curve, the curve to which animate nature naturally inclines. It was the product of a poetic nation. When the Romans, the lawgivers of the world, transferred the Greek forms of architecture to Italy they made the cyma of two halves of a circle, a thing fixed and measurable, and, though law remained, poetry perished. What is poetry but that which expresses thought in such a form that the imagination is quickened by it? Is it not what we know as feeling?

But with feeling there must be another quality to line.

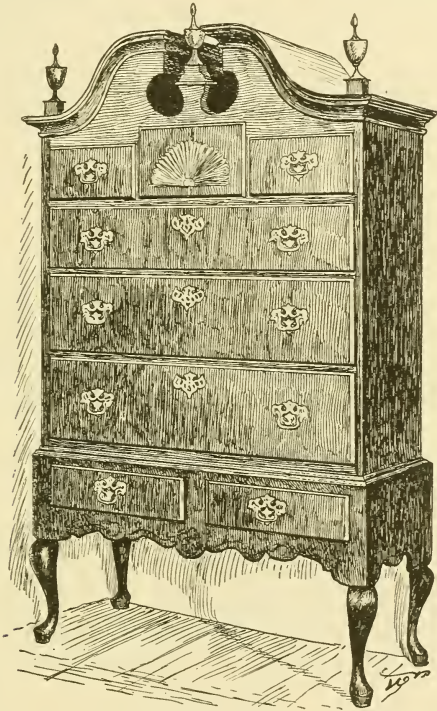
There must not only be grace, but it must promise equilibrium. When we speak of equilibrium in reference to furniture we mean not only its real but its apparent stability. To be restful all articles about us must look as if they were capable of sup-



A Light Stand

porting weight and of resisting force to some extent. To gain this effect in furniture the base must never be smaller than the body of the article, no matter how much the outline may be broken or curved. The top may project as in the case of a table or chest or bureau, nay, should project to give an air of finish

to the object, as the overhang of a roof terminates and justifies a building. The supports may be slender and very much drawn in at the centre, but if the base is as large or larger the



A Colonial Highboy

effect is pleasing to the eye. If we should draw a line from the arm of one of the French armchairs to the floor we should find that those graceful legs came out at the bottom to touch it. Sometimes the supports extend noticeably beyond the body,

as in the lowboy we give in the text. In this case the outward curve of the leg is met by the spread at the foot, and both are made use of to justify the increased size of the top. Or, if we look at the light stand, which is a very fragile little piece of furniture, we find that by spreading out the base there is an appearance of strength and solidity. Were the legs no wider than the top it would not look right. The Chippendale chairs also! How strong and firm they look from the outward sweep of the legs at the back! Illustrations of the French and Chippendale chairs are given on Plates X, XI, XII.

Thus there is a good deal of proportion in the line of furniture, though we are apt to think it a mere matter of correct ratio between the height and the width.

There is a secondary quality also to proportion. Certain laws of measurement must be followed if the effect is to be pleasing. Yet a piece of furniture thus well proportioned in itself may by its surroundings be thrown out of balance. The eye plays us curious tricks, and sometimes exact measurements must be falsified to suit the vision. The swell of a column at the centre to avoid the look of drawing, which it would have did the lines run true, is a case in point.

We will find that when we desire to judge of proportion our first process is through 'negation.' The mind says: "It is not too high, it is not too wide," then comes the second thought: "It is not too high for its width; the height and width balance," and we conclude: "It is in proportion." Finally, we observe that the object neither detracts from its surroundings nor loses because of them. Therefore it is proportioned to its place. It is this second quality of proportion which we must bear in mind as well as the first when we select our furniture.

DECORATION

When, therefore, we judge of the merits of a piece of furniture and analyze its claims for beauty it is line and proportion which we must first consider. But this is not all. We must further study its decoration and the development of the qualities of the material through it. At first sight decoration might

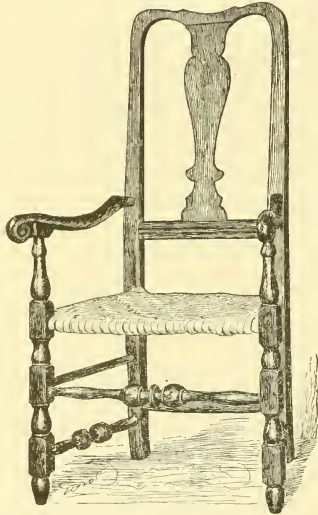
seem to be the most important claim for selection. It is the crown of excellence, and is often the chief cause for desiring the possession of a piece, yet it depends for its display upon the proportion and line of the piece and upon the material for its possibilities.

Man is essentially a decorator. From the time he notched his arrows in a pattern that he might recognize them in the prey to the present day he has longed to make his surroundings his own by the sign manual of self-expression. It is through the judgment so cultivated that the sense of beauty is trained. The self-expression through ornament antedates in the race and in the individual the sense of line and proportion, because associated with the sense of color, which is one of our earliest-felt powers. It is the idea of color conveyed in the breaking of the light in variety of surface which is at the bottom of all architectural decoration and in derivation of the decoration of furniture. Yet it is a fundamental principle of art that decoration should be the handmaid of construction only. Anything which man executes should be fitted for its purpose or it has no right to exist. Thus as decoration is a matter of the treatment of the surface only, all decoration which nullifies the purpose is wrong. And as decoration is intended to embellish the material, all decoration which betrays the material is wrong.

But while color is the effect sought, still line is the all-compelling force in decoration. It leads the eye irresistibly and the imagination after it. There must be thought dominating decoration and power in expression. All patterns whose lines lead out from their central point produce unrest. Weak symmetry is unpleasing. Rampant novelty is apt to betray us. If an appearance of lightness and strength characterizes both the objects and their decoration, they will always satisfy us.

We do not long study the forms of decoration without recognizing in them the symbols of thought of the peoples who wrought the objects which they beautify. They are the symbols of the religious thought. There are few of the old forms which we repeat to-day which were not originally religious

symbols. Not the Renaissance shell, not the Persian palmleaf, not the Indian tracery of geometric lines is without its prayerful meaning. For the principles of decoration were worked out by the hands, often women's hands, of folk that prayed dumbly as they worked and believed that they infused divine properties into their handiwork. It is this property of expressed thought which has given their creations their vital



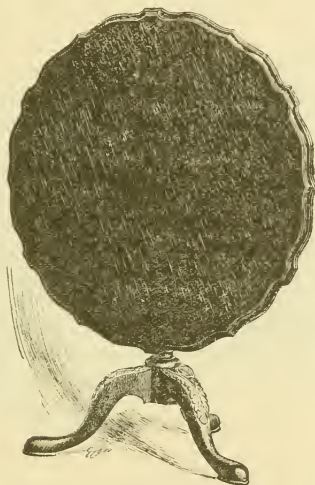
A Colonial Rush-Bottomed Chair

quality. When there is no thought expressed decoration becomes meaningless and detracts instead of adding to an object.

MACHINE-MADE FURNITURE

In our study of furniture we are continually referred to the old forms as much better than what we now have. Old furniture was created under the laws of sculpture. It was modeled and the construction was ornamented, and thus judiciously em-

phasized. Sculpture was one of the earliest of the arts to express beauty in the concrete. Its lines were pre-eminently governed by feeling. Take, for example, the chairs of the old French styles we show. The grace lies in the softly modeled curves, which are the result of the brain action of the maker, revealing himself and his race in his work. Also the allied English forms known as the Colonial styles, the work of



A Goose-Necked Table

Sheraton, Chippendale, Johnson, and Heppelwhite, shown on Plates XIII, XIV, and XV. Here is the virility of the British temperament and the individuality of the men as manifested in the adaptations and evolutions of the earlier foreign forms. These men all thought as they worked. "Plenty of wood, and make it strong," was the dictum of William Morris some time later. The Colonial furniture has wood enough and it is strong, but it has also grace, for it expresses

thought, and its lines are all drawn by feeling. Other specimens of Colonial furniture are given on Plate XVI.

Most of our modern furniture is made by machinery. A machine does not think, it has nothing to reveal, it has no feeling, nor can the human beings who manage it put their thought into it. It acts on law. Moreover, the designer is limited by the limitations of the machine. In drawing patterns for articles which are to be turned out by the hundred thousand copies concessions must be made which are fatal to good form. That is what is meant by machine-made. All on the same pattern and that pattern dominated by the machine. The trouble is partly that we are asking machinery to do what it can not; that is, replace thought.

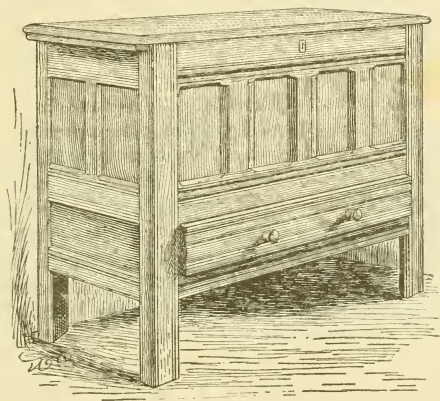
There lies in the future the discovery of some style which is simple, and possessing the charm of directness and finish which is entirely within the possibilities of the machine, which we will accept as we do thousands of things made on the one pattern when that pattern is good. Real thought may be repeated forever without losing its inherent quality. When the pattern which we give to machinery to carry out is real and original, not a perversion of thought to suit its capabilities, we shall have good furniture, not eyesores, which will be within the reach of the small purse.

FITNESS IN FURNITURE

But to make an article good for its owner there must be not only line proportion and suitable decoration, there must also be fitness to its use. There are things whose use has departed and which we treasure more as objects of curiosity than because they fill a felt want in our civilization. It is the association, either personal or historic, that so much recommends old things to us. But furniture is only lumber when there is no reason for its presence.

The Colonial bridal chest which we show is a case in point. This is both curious and interesting, demonstrating as it does one phase of the evolution of the simple chest into the chest of drawers, a name now seldom used, so thoroughly have we

adopted the French word, bureau. It is a solid and respectable article, and can well be imagined in any house of moderate size, though it might be in the way in a tiny apartment. It suggests possible use. But the highly carved, much-decorated chest of the Middle Ages, which in itself is a beautiful object, is decidedly out of place in the average house. It suggests no use. It could hardly be considered a fitting place for the family linen. In its day it was one of the most useful pieces of furniture known. In some cases it was the only one. By its means the



A Colonial Bridal Chest

goods of the family were transported from one place to another. It was often the bed by night, and not infrequently the table by day. Now it is an ornament of our drawing-rooms merely. It is to be valued for its own symmetry and decoration, but it should not be allowed to usurp the place or the money due to other needs. It is distinctly out of place in most of our houses. So are chairs on which it is not safe to sit, however graceful or historic. So are tables which serve only to take up space and impede locomotion. So is everything which has not a direct purpose in our life.

But many things which justify their existence by their own merits may suffer if wrested from their proper environment. The graceful French chairs are too slender for the dining-room, the heavy German too clumsy for the reception-room. The one room requires solidity, and the other grace. We must also combine our periods and styles suitably, and remember that while all periods and styles may be mingled in a house which is frankly a museum, the effect is more pleasing when one order of epoch is grouped by itself. Very elaborate houses have rooms decorated and furnished in a single period, and combine both allied and diverse periods under one roof. We stray from a Louis XV boudoir to an Empire drawing-room. Perhaps it is national styles which are brought together, and it is from Japan in the reception-room to Holland in the dining-room. Such houses are in their way also museums, and are not to be therefore despised. They must be both very large and very well done to be successful. The small house which is built strictly to live in does not offer such opportunities for furnishing. It should be homogeneous to a far greater extent, and only such things should be brought in relation to each other as will be harmonious in general as well as good in detail. We may have different periods which are not so diverse that the change creates a feeling of shock, but not different countries. Besides, the house itself enters to a great extent into the question of style of the furniture, as we shall later consider.

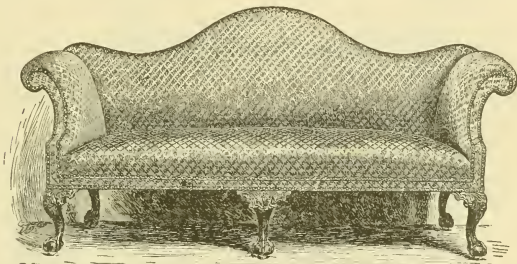
Finally, when we purchase our furniture we should take into consideration the material as much as the style. The duration of charm lies often in the material. Fine woods will be handsome when upholstery is disgustingly shabby. Marquetry and rich carving preserve their beauty through years of use.

FURNITURE AND HISTORY

We give in this work certain examples of furniture. They are not the only styles that exist by any means, nor the only ones which we would indorse as good. They are well marked types which show certain qualities we desire to bring to notice, and whose price is within the limits of moderate means. The

chairs and sofas of the French styles and the English Sheraton and Chippendale and the others of that school we reproduce are exact copies of models now in existence of the art of the times in which they were created. They have all of them "feeling" to a marked degree, and as individuals each shows something of the demands of its period for comfort, as well as the artistic temperament of its designer.

There is nothing which will repay study to a higher degree than furniture. Like architecture, whose companion art it is, it forms a record of a country's varying ideals. Taken in the large, it is a complete history of civilization. The early man put the main part of his artistic expression on his weapons. They



A Sofa in Independence Hall

were indeed his life. As later the idea of home developed with its evolution of comfort, art was applied to the decoration of the dwelling place and the articles within it. Our modern furniture was the outcome of peace and stability of government.

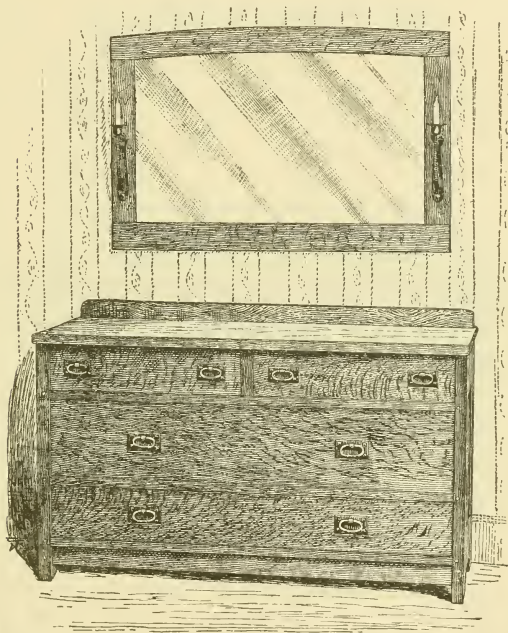
The Middle Ages left us little outside of the chests referred to and a few chairs. That was all they had. The tables of the day were boards supported by trestles, the beds, when they had beds, small inner rooms screened from the searching draughts by curtains and in some instances by panels, the wall decorations woven or wrought hangings. This was enough for those troublous times. Life was too strenuous for much ingenuity to be spent on comfort. It was the comparative

peace which followed the final crystallization of the mixed peoples of Europe into modern nations which gave time and opportunity for the development of comfort.

In this study of comfort France took the lead and has left us what might almost be called a diary of her life and thought. Take for instance the examples we give of the furniture of the times of the three Louis and the derived English styles. (See Plates IX to XVI.) Contrast in these designs the florid ornamentation of Louis XV's time with the sober magnificence of the preceding reign and the reserve and sincerity of the succeeding. And then compare the three styles with the history of the three reigns. Can we not follow the trend of the nation as well as if the chairs themselves spoke? It is in the productions of the time of Louis XV that we see the temperament of the old régime most completely revealed. It is in the productions of the time of Louis XV that we see the over-elaboration and unmeaning decoration so frequent in this period, do we utterly condemn? We are much more apt to be influenced by the thought of the beauty, grace, and wit with which it is associated, and to speak of "the charming bad taste of the time." About the most exaggerated specimens there still hangs something of this charm. Did not there remain unsmirched in the most dissolute circles some ideals of conduct which showed magnificently at the time of trial?

But we do not say "charming" when we speak of the creations of the Second Empire, known in our country as the black walnut period. It was of all times in modern history the epoch of false ideals—rather of no ideals. This was an empire erected on deceit and abuse of power, honeycombed with lies, rotten with bribery, whose manners we copied, and whose fashions we followed. Were we not ourselves in the throes of the death of a false system of our own? There was nothing in the styles of the day real or substantial, nothing graceful. In dress the form was disguised by an enormous hoop. In furniture there were bad lines and tasteless combinations of woods relieved with black and gilt, superseding the graceful adaptations of the

earlier French styles in mahogany and rosewood. It was a coincidence that the cabinetmakers of France and we, their humble followers, should have chosen for material such a wood as black walnut—inflexible, liable to split, so that relief from



Mission Furniture: Chest of Drawers with Glass

carving was not feasible; without depth, so that outside aid had to be called in if we were to have anything but the most severe lines. It was the fact that severe lines were not possible in that time that gave us the horrors which still exist in some of our houses.

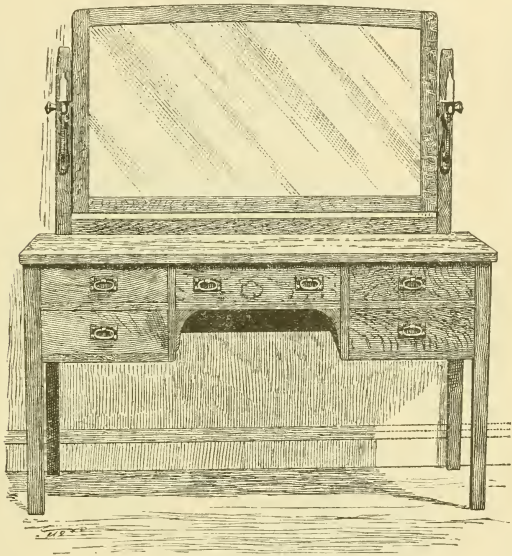
INFLUENCE OF MATERIALS ON STYLE

We have thus arrived at the consideration of the final qualification which characterizes the really good in furniture. It is the material itself which, by its adaptability to certain forms of decoration, or its need of them to bring out its own virtues, decided the style of the furniture made from it. When we depart from these forms we sin against the material and ourselves. Take the rosewood furniture of the fifties and early sixties made on the lines of the Louis XV styles. This is a hardwood of such even grain that it can be carved in high relief without danger of splitting. Indeed it is not uncommon to see a slender stem in full relief connecting flower and leaf, and mirror frames in intricate open tracery. The wood is beautifully veined, but it is so dark that it needs the relief of the broken surface to give it color. The heavily carved, deeply channeled, handsomely curved French models were ideal for showing the beauties of such a wood. If made up on severe lines it is sombre in the extreme, but by means of the broken lights of the carving and the curve of form it gives the effect of lightness and grace.

But this period was not free from sins against the spirit of the wood. We see many specimens of mahogany also deeply carved and channeled, and losing some of its best characteristics thereby. The veining of this wood, the beautiful lustre it will take, and the wonderful depth it shows under polish make it pre-eminently the wood for plain surfaces and softly swelling curves which catch the light and show off the veining. Only the slightest decoration in low relief is permissible. It was a wood of all others to express the sturdy virtues of the Colonial period both here and in its original English home.

And what better example of the spirit of the wood showing itself in the style of furniture belonging to the period than in the Mission furniture? We give not only two examples of this furniture here, but also tables, chairs, etc., on Plates XVII and XVIII. They are a modern departure. Whereas in the old pieces we have mentioned there was the curve of

line to be considered, this deals almost exclusively with proportion. There is absolute sincerity and a pleasing severity of effect. Is this not the time when we are arriving at an ideal of simplicity and sincerity? What is our national life



Mission Furniture : Dressing Table

nowadays but the assertion of the early ideals against the mistaken policies into which we have strayed?

FURNITURE AND THE HOME

We thus see that in selecting furniture we should be guided by the intrinsic beauty of the piece, by its value of sincerity and of association, as well as its harmony in style and period with its fellows. There is to be considered, also, the relation

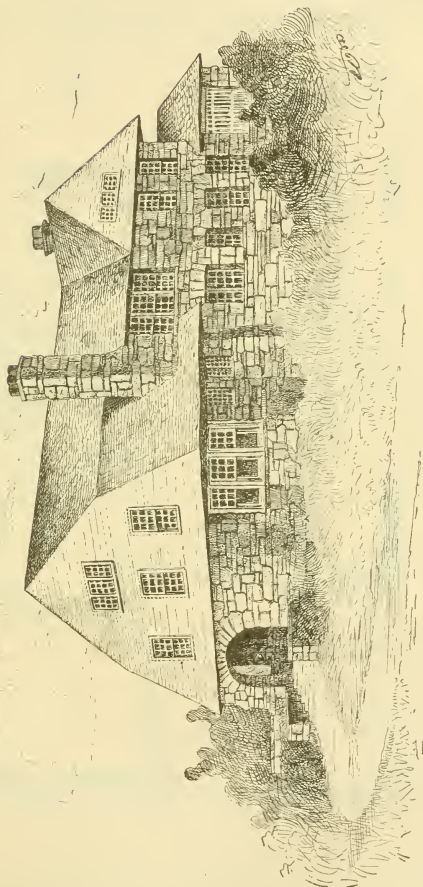
of the furniture to the spirit of the house into which it is to be put. Thus we come finally to the conclusion that if we want harmony the house must govern our choice. Or if we are the possessors of truly good furniture we should build our house to suit it, in such a style as will set off, not rob it, of its effect.

We are fortunate to be able to give our readers the views of the "Craftsman" house and the models of the "Craftsman" furniture which belong to it. This is a case in which the house and the furniture exactly correspond. The house is a model in many respects. It is simple in its plan; it is symmetrical; it is not cut up. The rooms are in good proportion in their measurements and for the purposes for which they are intended. The carpenter has been called in to do his part in the special fitments, and has made them to correspond with the lines and style of the furniture. Four interior views showing these special fitments are on Plates XIX, XX, XXI, and XXII. Nothing could be more harmonious, and nothing in better taste. Suppose we should set into that house the furniture after the lines of the French articles we show, would there not result a very unpleasing incongruity?

In a "Keeping-Room in Colonial Style" (Plate XXII) there is quite another kind of a country house presented, with its different style of furniture. Here the Colonial style of the fireplace and the delicate moldings permit the use of sofas and chairs of the Colonial period. In such a room even the tapestry-covered, highly carved furniture of the French pre-Revolutionary time would be in keeping; that is, if not mixed with the heavier Colonial. But that our sense of propriety should prevent.

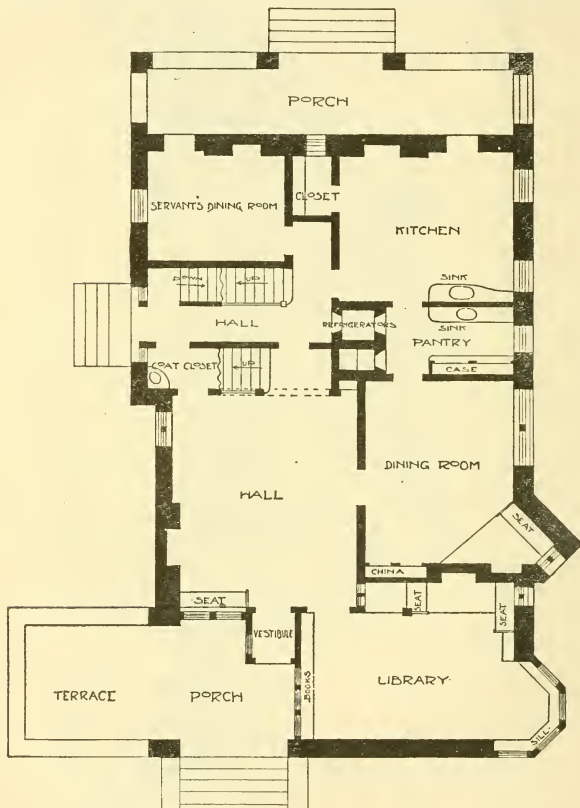
BEDSTEADS

The two bedsteads shown in the text have been chosen for their simplicity, not because they demonstrate any new style of make. The metal bed is an excellent type of its class, absolutely plain, and depending for its power of pleasing on its proportions and its lines entirely. The model is brass, but it can be found in all shades of enameled iron whose price is



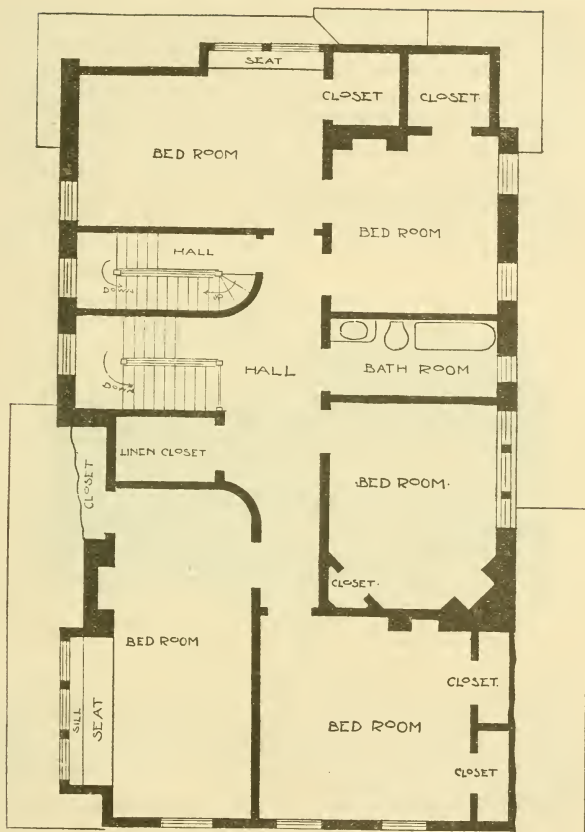
The "Craftsman" House

within the reach of all. There are wonderfully beautiful metal bedsteads made of all styles, whose decoration is a delight, but



The "Craftsman" House: Plan of Ground Floor

unless placed in the right environment they do not show for what they are or else they kill their surroundings. There are

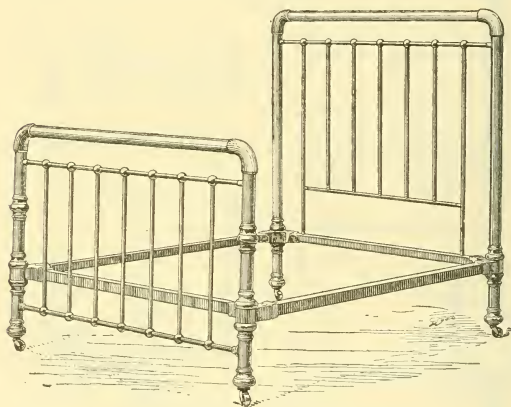


The "Craftsman" House: Plan of Second Floor

also numbers of extremely ugly metal bedsteads, which are tawdry in the extreme, and would ruin the look of any room. Such a one as we show is handsome anywhere.

The wooden bedstead given is a variety of the "Craftsman" designs, also selected for its simplicity, though all the "Craftsman" models are simple. This demonstrates the beauty of the straight line and accurate angle. We do not sufficiently appreciate the value of the right angle in our surroundings. There is a veritable rest to the spirit when the eye rests on an uncompromising angle, such as the corner of the room. It is a place where we may stop and begin again.

The "Craftsman" furniture is always dark, and its color



A Metal Bedstead, Simple Form

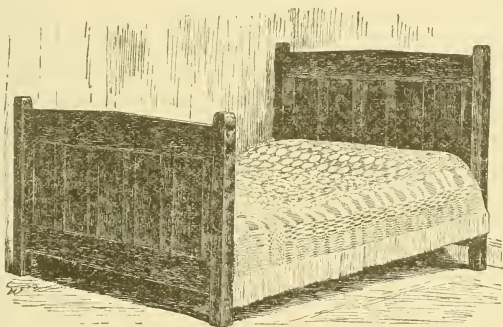
should be considered in all schemes for furnishing. For light bedrooms, where the whole combination is to be high in key, a metal bedstead and the other articles of light wood are a more suitable combination.

HOME-MADE FURNITURE AND MAKESHIFTS

In the purchase of furniture we advise deliberation for the sake of beauty. We also recommend it as a real economy. It is a mistake and money wasted to buy an inferior article which we recognize as inferior, when by waiting we might be able to

get the thing which will suit us perfectly. Better turn our rooms over to the carpenter entirely, and by means of window seats and settles dispense with sofas, make cupboards replace sideboards and closet shelves chiffoniers, and limit ourselves for a little while to the strictly necessary, and have that good, than to fill the house with cheap stuff of bad style, hoping to replace it later with what you really want.

And we would warn the homemaker against running into the other extreme—the fabrication of home-made furniture. This is as a rule very unsatisfactory, and it is also expensive,



The "Craftsman" Bedstead

for the first cost of the material is money thrown away. There are possibly some born cabinetmakers who have strayed into other walks of life who can be trusted to turn out articles well designed, well made, and well finished, but these are few. The home cabinetmaker is one who is possessed of more hope and imagination than experience, and who is the first to tire of the result.

With home-made furniture we would also warn against makeshifts. The evolution of the packing-box is a process allowable only in an environment which is itself an unfinished process. A summer camp, a mountain cabin, any place where

there is a sense of the transitory, this is the appropriate home for makeshifts, not a well-elaborated house where they must come in contact with finished furniture.

We remember with great pleasure an attic whose owner had covered the bare rafters with flowered chintz, and made every article of furniture in the room except a couple of chairs from packing-boxes. Even the bed was a long case which had held a mirror, mounted on casters, and covered with a mattress. Its side had been removed and the space within was utilized as a drawer. Bureau, washstand, and bookshelves were all boxes screwed together, covered with chintz, and the openings protected with curtains on neat little brass rods. The result was charming, but a woman whose taste could evolve such a room from such materials would be the first to condemn the mingling of these transitory effects with real furniture in a real room. It would outrage that sense of fitness of which we spoke.

XIII

DECORATION

Ornaments in Decoration—Treatment of Wall Surface—Fabrics as Wall Hangings—
Hanging of Pictures—Color in Combination—The Binding Tone
—Properties of Colors—The Monotone and Combination

ORNAMENTS IN DECORATION

THE object of furnishing is twofold: the comfort of the body and the pleasure of the eye. The pleasure of the eye is largely dependent on the simplicity secured. There may be detail, but the main idea of the room or of the house in large should be apparent. What we should aim to obtain is always simplicity; simplicity of line, of drapery, of color, of things. The artistic woman, especially if she be beautiful, desires to be the central feature of her home. Such a woman will dread the effect of a multiplicity of articles in her boudoir and reception-room; she will wish her belongings to be adjuncts rather than rivals; means of expression rather than objects of surprise. To the homemaker her house and its furnishing is the background of her home, and she devotes herself to its arrangement on that line.

The pleasure of the element of surprise of arrangement was mentioned in connection with the architecture of a house. This quality of surprise is also one of the triumphs of decoration. But it must be watched, and the real value of any combination into which it enters carefully weighed. It is sometimes the result of the sense of incongruity. Such was the ruling motive of many of the artistic attempts of what we may call the awakening era, the period of ten years or so directly after the Philadelphia Exposition, when decoration in its humbler rôle of art applied to homemaking went mad.

In all incongruity there is a sense of humor. We found decided humor in bows of ribbon flaunting on the coal scuttles

and tying up books which were on the table, supposedly for the purpose of being read. But from humor the descent into buffoonery is indeed short; and from smiling complacently on bows attached to objects from which the idea of a bow seems far removed it was not difficult to look with favor on the decoration of things which are in their nature undecoratable, and whose translation into the sphere of art quite took them out of that of usefulness. Beribboned fish-broilers fondly considered as paper-racks, key-holders made of rolling-pins, and the like! Well, we wanted to make our rooms "look pretty" and did not know how, that was all there was about it! Have we yet learned that ornament is not always decoration?

TREATMENT OF WALL SURFACE

To the untried furnisher coziness is a snare. It is usually associated in a man's mind with unusable articles and things in the way when he wants a match. But what we fail to accomplish by the multiplication of objects and crowding of furniture is easily done by means of color. We need fear no bareness of effect, however little we may have in a room, if the color scheme is good and well managed.

The color of the different parts of a room have a certain relation to each other. The tone should be deepest at the floor, and grow fainter through dado, walls, frieze until it reaches the ceiling. These different parts may be of contrasting shades if desired, with as much decoration as the general scheme of the room will permit. This is, of course, only feasible when a room is of such noble proportions that we desire to cut up the wall space in order to draw ceiling and wall nearer to us. The rooms of our ordinary modern houses will permit of no such arrangement. As a rule, the wall covering must run up to the picture molding, unbroken by lateral lines. An airy effect is given by sinking this picture molding a foot or eighteen inches, if the height of the room permits, and continuing the ceiling color down to it. The old decorators turned loose in the high and narrow rooms of our city houses lost themselves in the attempt to bring down the ceiling. The modern house needs

but to have its wall so covered that it will be in harmony with the rest of the room.

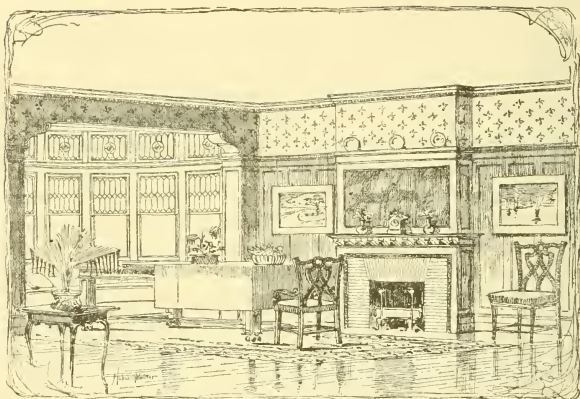
A room gains immensely in apparent size through the pictures on its walls. Pictures are little windows which lead us out of our immediate surroundings. They should be good of their kind. We can not all of us own masterpieces of painting, but there are admirable reproductions whose possession is not extravagance. Good pictures make a well-furnished room without much more, except the absolutely necessary tables and chairs.

But when there are many pictures to be hung and much in the way of ornament to be displayed, the wall should be covered with a plain paper which affords a binding tone. The effort to obtain a living, vibrant quality by decoration is successful only when the decorated spaces are sufficiently unincumbered to allow to the pattern its own artistic value. When paper hangings and carpets are fighting for supremacy with objects of art, the total result is not invigorating life, the true aim of decoration, but confusion and mental worry. In very large rooms, however, a certain effect of texture is to be desired to give depth and richness to the wall color. For this the use of any of the various embossed preparations for wall coverings is permissible if in uniform color, or in very slightly contrasted shades of the same color, or the self-colored embossed paper may be used.

It is when there is little to hang on the walls that we need a patterned surface. The beauty of wall paper thus is strictly relative. We may decorate by treatment of the surface, or by what we put against that surface. We have in mind the drawing-room of a house occupied successively by two friends. The first was a winter resident whose home and furniture were in another country, and who had reduced her belongings to the lowest terms. She papered the walls with a marked and graceful pattern of blue and white, which furnished the room in itself. Her successor, however, after a miserable period of striving to reconcile the paper and her beautiful water-colors and fine collection of china, was obliged to cover the walls with

cartridge paper in a dull olive to show her possessions to advantage.

The style and pattern of a paper must be decided by environment. The decorations of a home have, outside their intrinsic beauty, a psychologic value. They constitute a ministry to the imagination of its occupants. As such they should be opposed to the outer surroundings. In the city they should approach natural forms; flowered wall paper leads the mind into the living world, but in the country formal decoration is



Formal Decoration (Frieze) in a Country House

more pleasing. Thus, it would be a mistake to paper a country house with a pattern of daisies when there are fields full of them and other flowers just outside. There is no relief of contrast. The daisy in the city bedroom, however, would be an agreeable reminder of the country, and would not suffer by comparison with the original.

Mrs. Wheeler, one of our most successful decorators, goes even further, and urges for the country house plain walls as a rest from the variety offered by the landscape. Much-deco-

rated walls thus have a fitting home in the city where the eye is trained to see only the lines and angles of the blocks of houses.

When the wall space is much cut up by doors or windows, the pattern should be small, whether formal or natural. Large rooms, where the furniture leaves the wall space empty, may be treated successfully with hangings of bold and decided patterns.

When wall paper is bought it should never be from the small sample. Apparently innocent figures will develop trying combinations among themselves. Grotesque patterns, though not always as marked as Mrs. Stetson's "Yellow Wall Paper," are usually resolvable into human faces, and turn easily into nightmares when the habitués of the interior are at all nervous. It is astonishing how numerous and ugly the faces into which fancy will force almost any meaningless group of line and spots. All such should be avoided, so should splotchy papers and those whose pattern may be analyzed into oblique lines. They become hateful almost as soon as on the wall. It is well to see two or three breadths of the paper together before deciding. The color of paper also differs much if spread out from the effect it gives when hung. It is anywhere from two to ten shades darker on the wall, and any tone of brown which it may contain asserts itself strongly.

We have written to very little purpose if there must be an insistence of harmony of style in a room. Yet how often do we see a Renaissance wall paper rising from an Oriental rug and crowned by a well-defined geometric ceiling? We are profoundly penetrated with the discomfort of the ceiling coming down and the rug going up, but can sometimes hardly tell what is the matter. And we even sometimes see an Eastern rug on a figured carpet.

May we not enunciate a syllogism? All conflict is worry. Lightness and freedom are incompatible with conflict. Therefore that room is most comfortable which gives the effect of lightness and freedom.

That room is in good taste when the floor is darker than the walls and the walls than the ceiling. Anything which does

away with the solidity of the floor effect or arrests this upward tendency of the wall defeats the purpose of the rightful scheme of the room.

FABRICS AS WALL HANGINGS

There are various fabrics which are used as wall coverings, especially when a uniform tone is desired. Burlap is the most popular of these. It comes in almost all tints, and can be dyed to any desired shade. When on the wall it may be painted or stained, if it is desired later to alter the color of the room.

The cartridge paper, which is the most generally used of the plain papers, is very thin, but then it is very cheap. A similar wall covering is made in much heavier quality, which is more desirable, but it is also more expensive. Cartridge paper will fade by the action of sunlight. It may be calcimined or painted to any desired tint when its first freshness is past.

There have been beautiful decorations made with these textured walls for a background. A very exquisite boudoir was once covered with unbleached cotton cloth, on which the artist husband drew in sepia the history of Penelope. Mr. Whistler's famous peacock room is, at this writing, in transition from one great English house to another. These were intended for rooms for occasions. A room in which one must live can not be bizarre. In so far as it asserts itself it ceases to be the background of our lives, and becomes an entity in itself.

In putting paper or a fabric on the wall it should always be centred over the mantel and the mismatch allowed to come over a window or the door of entrance. When the paper has a marked perpendicular character, it should be so hung that the middle of the pattern will run down any very narrow space between doors or windows. This will make a mismatch occur over the window or door. It would be the one which has the less space above. A mismatch is less noticeable if the overlapping paper is cut out to the pattern and some concessions made to enable it to run into that of the next breadth.

We have spoken of the washable paper as appropriate for a kitchen and bathroom. It should be hung in a nursery also.

This is a room which, like the other two mentioned, is the better prepared for its use if it has a wooden wainscot. The plaster of a nursery inhabited by healthy and inventive children is wont to suffer very much at their hands.

Nursery paper should not be too gaudy. Good taste may be as well inculcated early as struggled for late in life.

HANGING OF PICTURES

While it is true that every article in a room enters into a relation with every other, for their mutual advantage or disadvantage, we find in hanging pictures that between the objects we put on the wall there exists a very close connection independent of that which joins them to all the other furnishing. Pictures must be selected for a room with reference to their individual color scheme, to their size and to their frames, as well as to their subjects. We may not mingle water-colors and oil paintings in a small room with engravings and photographs, nor highly colored paintings with those of delicate tone. We should not mix subjects which conflict in sentiment. Finally, we must make our selections with the character of the room and its own color scheme in mind.

We must also hang our pictures with regard to the shape of the wall space. We should not put tall and narrow pictures on the wall which has a long and wide stretch between casements or furniture. And we should not bring together a too great diversity of frames.

One thing is very important to a restful and attractive wall effect. Every picture or other object must be hung with reference to a base line, and the lower edge of large pictures must be on it—that is, exactly the same distance from the floor—if we are to have any piece of mind. Moreover, too many small photographs will look spotty unless grouped in panels. These panels ought really to be measured to suit the place they are to occupy. If hung above a piece of furniture the panel should run a little longer than the bookcase or whatever it may be. Over a mantelpiece it is well to have it project an inch or two on both sides.

The different photographs or etchings in the panel frame must also be well arranged with regard to each other. The eye travels from left to right naturally, and rests on the right hand side of an object. Any grouping which will bring the lightest photograph at the right hand of a panel will make it look weak. The photographs should grow in intensity of shade from left to right, and if there is any difference in size it is the largest which should be at the right hand end. They should also be so put together that there will be no interruption of thought in the series. Photographs of foreign cities, for example, should not be so arranged that the eye, leaving a landscape which has much sky at the edge, encounters the cut-off side of a tall building in the next view. Where there are several in the frame they should be treated in composition as a landscape, and grow in intensity and boldness toward the centre, decreasing to the other end, always so arranging the ends that they may conform to the above enunciated rule. In magazine work, this arranging of pictures is called "make-up," and the pleasure we derive from well made up pages is a very real, though often unconscious, factor in our judgment of the periodical.

Pictures should also be hung with reference to the eye line. The base of a large picture should be only a little below the ordinary line of vision. We look up much more easily than down. With landscapes there is a curious sense of something wrong if they are hung too low. We are used to seeing the sky above, not below, our outlook. It is akin to the discomfort of a window which is not high enough to permit one to see the sky in a casual glance. All pictures should hang flat against a wall. The small pictures should hang low.

COLOR

We have said that the perception of color is one of the first qualities which awaken in the mind of the child. Yet it is the one in our power most often to play us false. Certain visual peculiarities affect us. We may be what is called color blind. Sometimes this is evinced by the impossibility of distinguishing

a color from its complementary hue. For this reason a rigorous examination of the eyes of all signalmen is necessary. Not to be able to tell a red from a green light means the death of many and the destruction of property to an untold extent. Sometimes this color blindness consists in a mere differentiation of sensations, as opposed to a keen realization of the properties of the individual shade. As in the case of the man who confessed that, though he could not tell one color from another, when a color affected him disagreeably he found invariably that it was yellow.

With a great many people this insensitiveness to color shows in the curious combinations in which they indulge. It seems sometimes that combination is a racial characteristic. Indigo and maroon was the New England color scheme which so astonished Miss Phelps. The negress cheerfully mingles purple and yellow in her hat, and the Irish put brick red and magenta together with every appearance of pleasure. Opposed to these enormities is the French fondness for blue and green united in one costume. This union would have been hideous in the hands of any other nation, but became in the French handling of it beautiful, for the French possess a nationally keen sense of color and a comprehension of its laws.

That is the point. There are certain laws of color which we must learn if we wish pleasing results. To learn them we must study. To isolated individuals only does the perception of these laws come by nature. The mass of us must learn them. A few lessons in oil painting will do wonders with the insensitive temperament. The mere mixing of the colors is a revelation, not to speak of the training in applying them.

COLOR IN COMBINATION

There are four distinct grades of color knowledge, as shown by furnishing—the arbitrary assortment, the revolt to a single color, the discovery of the art of combination, and finally the law of the binding tone.

In the initial stage we amass all sorts of vivid colors in a single interior. Scarlets, hard blues, aggressive greens, and

vindictive purples wedded to fire color and orange are the frequent combination. Who does not remember the ingrain carpet in huge squares of scarlet and green, the family photographs in mats of royal purple, the yellow Holland shades, the horsehair sofa with its afghan in broad stripes of lemon, blue, and rose? In all probability a "cheerful pattern" in paper added whatever there could be of further discord. This was the result of buying things each on its own merits, without foresight as to its future associates.

Such a warring assortment of tints leads to the next step when we try to escape the errors of forced association by furnishing each interior in a color by itself. We may have essayed green libraries, gray parlors, rose bedrooms, blue dining-rooms, or even crushed strawberry front halls. But we did not go far in this kind of experiment without discovering two things. First, that when we said a blue or green room we meant one in which blue or green was the predominant color, and that there must be relief in shade and color. An apartment whose walls and furnishings were of a single shade would be a blank and depressing hole. The eye would seek for some relief, and the tiniest tack in the woodwork would hold it. Secondly, we learned that there may be a thousand shades of one color, but that only those whose variations are those of intensity and not of tone will be pleasing if united. The difference must be made by the quantity of black, white, brown, or gray in the mixture.

To the amateur there might seem to be many colors in such a collection, but the introduction of a single shade into whose composition enters an alien color would show him his mistake. We also learned that the hue must be neutral. It might be white, a blue and white room, for instance, or it might be gray. We learned, too, that it must appear in only one tone. Sometimes we found this contrasting color afforded by the woodwork, which relieved the various shades of the one color and tied them together.

When we reach the next stage we discover that in nature all shades fall into two opposing ranks, those which are strung

on a yellow tone and those which are built up on a basis of blue. In flowers we never find one family straying out of its own camp. There may be a thousand shades and colors in one group, but there will never be a conflicting tone unless man has taken the matter into his own hands and forced the issue. Thus, speaking broadly, all colors which belong in one division will look well together, though sometimes the combination may be crude.

But the members of the two camps can not be brought together without conflict, particularly those which are united on the basis of a common hue, such as the Hibernian combination alluded to, where the red but affords a battleground to the warring blue and yellow, and the mixture of crude complementary colors, such as red and green, blue and orange, purple and yellow, is not pleasing because of this same opposition brought out in the complementary colors, evoked by the shades actually present. Each red will supply its own green to the eyes, and each green its own red, so that we may not have two colors, but four, in the eye. So also each blue suggests its own orange, and each orange its own blue, and the subtile warfare produces acute discords which, for dissonance, can be compared only with a major seventh sharpened in music.

Thus we see that not only the colors actually present, but their complementary hues, must be considered when we essay combinations. When we analyze the success of apparently accidental juxtaposition, we will find that it usually lies in the complementary colors brought into play. Thus, in a room papered with a blue striped paper, in which was a slight green tint, the charm of the room lay in the life given to the paper and hangings, all in varying tones of the same blue, by sundry water-colors and posters into whose composition entered a yellowish pink. The blue responded to the yellow of the paintings and the red of the pink to the green of the blue.

Yet we may unite all and every color fearlessly if we but know how to do it.

THE BINDING TONE

It is when we come to the law of the binding tone that we have reached the secret of color in combinations. This is a neutral shade, which is part of all the colors which come into the combination. For example, a heap of scraps of cloth in crude and violently dissonant hues is extremely offensive to the eye. Yet the reflection of this very heap in a bit of mother of pearl, or an expanse of highly polished wood, may be exquisitely beautiful, because the ground color of the reflector is present in all the shades and harmonizes them. The binding tone is then a ground tint common to all combined colors.

The binding tone is not necessarily a common color. There is red, we remember, in both brick color and magenta. The binding tone must be neutral and call no complementary shades into play, or it defeats its own purposes.

The binding tone is sometimes used to unite colors to the eye, by actually separating them. Brown is a most useful binding tone for this purpose. It is the combination of purple and green, and since green equals yellow and blue and purple red and blue, brown compasses the whole spectrum. It is this brown base in the maroon draperies of picture galleries which permits paintings to hang near each other without conflict. It is the brown in the shades of olive green which permits these colors to be used for the same purpose.

Therefore, when we desire to combine colors we must bear in mind, first, that we may put together all shades of the same color which differ merely in intensity, all being made by the admixture of some neutral hue to the same color. Secondly, that in combinations of two colors in furnishing, the assertive color may be in all shades, if separated only as above, and that the other must be neutral and in but one shade. Thirdly, that we may not combine colors without reference to the complementary shade. Fourthly, that blue and yellow tones are always opposed when combined with other colors, but that all colors, if strung on a single one of these tones, will look well together. Fifth, that we may harmonize all conflicting shades

by means of the neutral binding tone. And, finally, that if we desire to bring out a certain color we must either isolate it by means of a binding tone, or oppose it with its own complementary color in a suitable modification.

We must consider always that it is in the prism only that we have pure color. Nature never uses the colors of the prism, but combinations. The unlessoned will easily go astray, for it is only practice which will enable us to discriminate as to the component parts of a color. It is the possession of just that skill, however, which makes furnishing and decoration a pleasure, and the satisfying result certain.

PROPERTIES OF COLORS

We have hitherto spoken only of the results of combination of hues. Colors have certain properties of their own due to their effect upon the nerves of the eye. Yellow is an advancing color, it strikes the eye, giving a decidedly pleasant sensation, bringing the object nearer. Thus it is deceptive, and adds to the apparent size of a thing. Thus it is a color to be eschewed in dress by large women. As the dress approaches one it makes a room look smaller than it is. The pleasing effect of this coming toward one on the eye goes far to replace the sunlight shut out by the walls. It is then an admirable color for a north room, or one which opens on a court or well. From its exciting effect on the nerves, it is a bad color for a sitting-room. Blue, on the contrary, is a retiring color, and is thus cold. So a blue room will be both larger and cooler than any other. Blue, then, is not the color for a north room, but for a summer bedroom opening to the west, and is to be especially recommended for a small room. Green is a stationary color, and so is red. Green rooms are always cool, and red rooms restful.

THE MONOTONE AND COMBINATION

Monotone schemes are admirable in bedrooms or dining-rooms or reception-rooms. A living-room, on the contrary, is most pleasing when there are a variety of colors combined with skill, which give the effect of a whole.

In such a room the eye will fasten on the one un-repeated note. This fact is to be considered in the furnishing. If there is one object of great beauty, its color must not be repeated in the room, and it will stand out with all the other shades as a background. We may have the most brilliant hues, but if we repeat them once or twice they will not assert themselves against the one thing. But one other object of the same color will spoil the effect entirely, no matter how small it is. So, if we desire to neutralize an objectionable object, we have but to repeat its color once or more and it sinks into the background.

XIV

RUGS AND CARPETS

Comparative Merits of Rugs and Carpets—Filling—Eastern Rugs the Pattern for All Rugs—Comparison with Machine-made Rugs—Freedom of Design—The Rug Border—Varieties of Eastern Rugs—Comparative Expense of Rugs and Carpets—Proper Arrangement of Rugs—The Dining-room Rug—Renovation—Choosing a Carpet—Examples of Styles—Laying the Carpet—Matting

COMPARATIVE MERITS OF RUGS AND CARPETS

THE comparative merits of carpets and rugs are to be considered in the treatment of floors. This is a matter which may be decided by preference without weighing the relative cost. There are carpets of all prices and rugs of all prices, too. Given a sum of money to be expended upon the floor and its covering, hardwood, its preparation, and the rugs which are to cover it would amount to very little more than the cost of a carpet of the same grade as the rugs. A person who would lay the floor with Wilton or Axminster would buy rugs on the same scale, while if it were an ingrain whose purchase was contemplated the rugs would be of corresponding expense. The advantage of a bare floor with a rug or rugs lies in its superior neatness and its artistic effect.

The bare floor wiped every day, often treated with turpentine, and the frequently beaten rugs are unquestionably more hygienic than a carpet. The amount of daily care involved in keeping them clean, so often complained of, is their highest claim for favor. A bare floor does not make dust; it shows it. The dust would be there if we had a carpet, but it would be held ready to rise in the air when disturbed, bearing with it any noxious germs which had accumulated.

FILLING

In regard to the æsthetic side, we all concede that a plain expanse of background color, with rugs of mixed and blended hues, gives a sense of pleasure to the eye which few carpets

afford. So well is this understood that where the floor must be covered, either because of its own faults or because of the liking of its owner for soft and noiseless going to and fro, it is the custom to put down a plain carpet called filling, and place rugs on it in preference to a figured carpet. This filling comes in all makes and all grades of carpets, from the most expensive velvet down to a denim variety, which is worth about fifty-five cents laid. There is no better background for handsome rugs. The color of the filling should be chosen with reference to the color of the room. We remember, though, with pleasure the effect of a house which was carpeted with green denim throughout. Some rooms had green walls, some blue or other colors. With one exception, there was always a faint green tint in the color chosen, which blended with the blue. The dining-room had been hung with a Dutch blue and white paper. Here the apparently conflicting floor and walls were brought together by means of a red brick chimney and hangings of a yellowish red. The law of the complementary color worked admirably in this case, the yellow in the red acting on the blue and responding to the yellow in the green, while the red and green answered to each other. Moreover, the chimney which had jumped at one before the curtains were put up became unobtrusive when it ceased to be the un-repeated note.

EASTERN RUGS THE PATTERN FOR ALL RUGS

The reproductions of Eastern rugs we offer were selected as representing fairly the varieties which would be chosen in furnishing an inexpensive house. There are many small rugs, square prayer carpets, and the like, gems of color and pattern, which we do not bring into this work, since they do not belong so much to the furnishing as to the ornamenting of a house. Nor do we consider the very large and very expensive varieties, the wonders and the luxuries of their kind.

Neither do we give space to the endless variety of rugs now on the market at low prices. They are some of them very good, particularly the Japanese cotton and the jute, which are fine in pattern and excellently colored.

We put before our readers examples of Eastern rugs only because they are the pattern for all rugs. When we have made ourselves familiar with their characteristics, we shall then know how to choose the other kinds. These are moderate in price and good specimens of their kind. Any one of them on a bare floor or placed on filling in a room of ordinary size would give character to that room. They are found on Plates XXIV, XXV, XXVI, XXVII, and XXVIII.

COMPARISON WITH MACHINE-MADE RUGS

In studying them one should note the different points which separate these productions of the hand and working brain from all machine-made rugs and carpets, where the mind, having given out a pattern, does not work on the individual object.

When we survey them carefully the great variety of the tints, brought together in exceedingly small quantities, which are yet under the control of one pervading tone, will strike us. When we look closer we find that these tints are assembled in obedience to a general law, not a set formula. A thread or two here, or less there, does not matter to the Oriental workman. He is feeling his design. It is this which gives the peculiar effect of atmosphere which we feel when we look at an Eastern rug. There is air between us and it. It remains on the floor separated from us by something impalpable, yet appreciable. This effect is particularly noticeable in the case of such rugs as the "Chi Chi" variety, shown where the faint variations in shade of the background and pattern give a sensation of shimmering light on the surface.

FREEDOM OF DESIGN

Another thing which strikes us is that there is no slavish subservience to symmetry of design. The workman who produced the Daghestan example not only allowed himself all the latitude he craved of figure and background, but when he found the carpet long enough in his loom he ended it then and there, regardless of the curtailment of his pattern. Even when adhering somewhat conscientiously to the main design, the

eccentricities which are indulged in in the background work are most expressive. There is balance, but little repetition. In the Guendjis rug, for instance, the eight-pointed star in one corner is considered to be kept sufficiently in countenance by a queer little running thread evidently a memory of the water sign, the oldest of all symbols. The Guendjis rug is individual in the use of crude but recognizable figures of men and animals introduced on a rather plain background to relieve the set pattern. The "Chi Chi" and other Daghestan and Shirvan and the Kazak rugs are remarkable for the variety of symbols and richly decorated backgrounds. It is in these fabrics that we see religion in the design, elsewhere spoken of, in its fullest expression. These are all expressions of thought, if we could but read them. In the reproductions we give, from the effect of light on the colors in photography, these symbols stand out boldly. In the rugs they are subdued and harmonized, and produce only a restful effect. It is their divergence of outline and color which is the chief influence in producing this restfulness.

THE RUG BORDER

There is one quality in the Eastern rugs which is peculiarly their own, and which we miss from the domestic productions, unless their designers are themselves truly artistic and also steeped in the Oriental ideas. This is the conception of the part the border has to play in the scheme of the rug. We see hundreds of Smyrna and other domestic makes whose centres are pleasing but whose borders are common; bold, insistent designs, with all the self-assertion of a wall paper frieze, on whose model they are formed.

But the frieze is one thing and the border of a rug is another. A frieze is intended to give character to the top of the wall. It is a decoration which emphasizes the transition from one plane to another, and should be possessed of vigor to draw attention to the change, and to make up for the retiring quality of the wall paper, which seeks to suggest to the mind rather than to hold the eye. The same characteristics are to be found

in the border of the carpet, which also emphasizes a change of plane and says a final and decisive word for the carpet. Both frieze and carpet border add immensely to the value of the pattern they inclose.

In an Eastern rug the case is reversed. It is the centre of the rug which is of importance, and the border is only the link between it and the outside world. It carries the color scheme in fine modulations to the outer edge, and finishes in delicate lines and figures. In a good rug the changes are almost imperceptible. Even where the dulness of the color and monotony of pattern in the centre throw out the border, it becomes a frame to the centre, not a self-assertion nor an explanation of the centre pattern. This is why we may lay one Eastern rug beside another and find the color atmosphere glide from one to another without a jar. To combine domestic rugs makes patchwork, not harmony, while the putting together of two kinds of patterned carpet is a thing we refuse to dream of, much less perpetrate. The specimens we give all illustrate this border quality. Perhaps the variety of the Daghestan known as the "Chi Chi" is the best example of it. We can but wonder, as we look, at the marvelously fine gradations of tone and the exquisitely delicate and intricate patterns with which the transition to the edge is carried out.

VARIETIES OF EASTERN RUGS

The Daghestan rugs, including the Shirvan and "Chi Chi" varieties, come from the Caucasus district. They are, as a rule, nearly six feet long by four wide; the size varies in the different specimens. The Shirvan, in this case, is five feet eight inches by four feet four inches. The "Chi Chi" measures five feet eleven by three feet eleven. The prices for such rugs range from twelve dollars for modern medium quality to from forty-five to sixty for the antique specimens.

The Kazak comes from Asia Minor. This is heavy in texture and bold in design, wrought in strong color. The one given measures eight feet and seven inches by five feet and six inches. They generally come in the square sizes. The prices

range from forty-five dollars to one hundred and twenty-five, according to quality.

The Guendjis is also a product of Asia Minor. This is a fabric which resembles the Kazak in wear, but is not so heavy. It is similar in design, though not so square in size. These rugs cost from eighteen to twenty-five dollars.

The Bokhara is probably the most easily distinguished of all Eastern rugs. The designs almost invariably consist of repetitions of the familiar octagonal shapes, the figures being wrought in cream, dark blue, dark brown, and similar shades on a rich, red ground. They cost from eighteen to fifty dollars.

COMPARATIVE EXPENSE OF RUGS AND CARPETS

As to the comparative expense of rugs and carpets, if we take a room eighteen feet square on which to base our calculations, we find that it would take something over forty yards of ingrain carpeting, allowing for a turn in, and between fifty and sixty of Brussels or velvet to cover the floor. The cost would vary, according to the kind of carpet we chose, from forty-five cents to one dollar and eighty cents and more a yard. Good ingrain can be bought for a dollar, the three-ply example given is two dollars, the Brussels and Axminster one seventy-five, the Bigelow Wilton two seventy-five, the American Wilton three dollars. Of course, there are yet more expensive carpets to be had. If there is a border there is extra expense, and the sewing, wadding, and laying also cost something. Now, at a rough estimate, in a room of ordinary size, there need be a third of the floor only covered with rugs to give an air of comfort and elegance. The cheapest carpet, with the attendant expenses, would cost more than filling at fifty-five cents a yard and two Daghestan rugs. A hardwood floor would be cheaper yet. Whereas, if we had intended to purchase a more expensive carpet we could increase the number and quality of our rugs to correspond. We have made our calculations as to the number of rugs in a room eighteen feet square. We have, however, seen a drawing-room twenty-eight feet long by twenty wide with but two rugs respectively eight by six and

twelve by four laid on a background of green denim, with no scantiness of effect. When the room is very large and the centre open, there may be cases where it would be better to get a Japanese rug of some size for the middle of the room. The cost would be about the same.

There is one great advantage to be found in the purchase of rugs as against carpets. We may always add to the collection of rugs, and can, therefore, afford to wait for the chance to buy a good one. The purchase of a yard or two of carpet now and again, however, to be pieced on to an insufficient floor covering, hardly appeals to one as a method of economizing with grace. A carpet, then, may be necessarily inferior in quality, from the amount of money we can spare for it, at the time we buy it, because we must buy the whole of it at once.

PROPER ARRANGEMENT OF RUGS

It is a mistake to scatter many small rugs here and there over a floor. They are apt to look spotty. They should be grouped if small. If there is a good-sized one, it ought to go in the centre to give character. As we have said, Eastern rugs can be brought close together without conflict. We have seen a room admirably carpeted, with rugs of all sizes laid close together. There was all the atmosphere of which we have spoken, and a sense of blended color which ignored the number. There was nothing haphazard about the arrangement, however. The rugs were all marked, so that when returned from cleaning they could be relaid according to a plan drawn out by their owner in such a fashion that each one was made to bring out the excellences of its neighbor.

THE DINING-ROOM RUG

Opinions are divided on the kind of rug suitable for a dining-room. If but a single rug is used this ought to be large enough to cover the space which is traversed by the maid in waiting on the table. Many people whose preference for a dining-room floor which can be washed often is decided, buy

the long, narrow hall rugs. These lie behind the chairs and deaden the footsteps. When this is done the legs of a chair must have rubber tips, or the noise of moving will be extremely trying.

We have spoken only of the rug with a design. There are some rooms which call vehemently for an absolutely plain floor covering. A simple square of filling without a border is restful and satisfying in such a case. It may be of any quality, to compare with the other furnishing of the room.

RENOVATION

All rugs may be washed when necessary. It is said that much of the beauty of the Eastern fabrics is due to frequent washing, which has blended the tones. Jute and cotton rugs may be dyed when their color has disappeared.

CHOOSING A CARPET

One who is acquainted with the qualities of the Eastern rugs should not go far wrong in choosing a carpet. She must know just what color she wants. There is so much solid color in a carpet that it will not do to trust to memory or to choose haphazard. A trifling variance from the tone of the room will introduce discord where there should be harmony. After the color comes the design. A carpet must not be spotty; it must not jump at a person, it should be the last thing which attracts the eye in traveling around the room. The decoration should be conventional, except in some extreme cases.

A carpet must also look right from any part of the room; it should contain a rich, though quiet, scheme of color; the decoration should be a scheme rather than a pattern, which is liable to be too obvious, and so be an element of disturbance rather than a pleasure. Harmony and equal force of color should leave a carpet a flat floor covering, from which nothing should challenge the spectator. If this defect appears it is destructive of the sort of atmosphere to which we have already alluded, which always makes itself insensibly felt between the eye of the spectator and the Eastern rug, where all is rich

and subdued. Our best designs follow the rug effects. The Bigelow Wilton we show, for instance, is evidently inspired by Daghestan or Kazak models, while the Bokhara octagonal is a very familiar pattern. (See Plate XXIX.)

EXAMPLES OF STYLES

The few examples of carpets given lose much in the absence of color. They were chosen as demonstrating the different qualities of the various styles, and illustrating also the relation of floor covering to furniture. The Axminster is a Louis XV design, which belongs naturally with the French furniture given. It is easy to see that it has no connection with the "Craftsman" styles. The great beauty of this specimen lies in the play of light on the moire background. The Persian effect of the Brussels carpet, number one, is quite marked, the Oriental influence extending even to the design of the border. It possesses atmosphere to a greater degree than is usual in a carpet of any kind. This carpet is suited for any kind of a room where the coloring is rich. The Adams design in Brussels belongs to the strictly conventional type. It is in self colors, and is restful and quiet, an admirable background for the furnishings of any conventionally modern parlor. This is true also of the Brussels number two. This is not the case with the Bigelow Wilton, which must have surroundings to suit it, or be ruined in ruining everything which comes near it. In itself it is beautiful. Its design follows the "New Art" (L'Art Nouveau). This is a style of decoration which takes its models from plant forms and conventionalizes them into a variety of graceful curves. In a large room with graceful and elegant furniture it would be admirable.

The three-ply is a Morris design, very subdued in color and pleasing in effect. It would be decorative as hangings for some large opening where substance as well as a subdued color is needed. The fabric is too stiff for small doorways.

LAYING THE CARPET

One drawback to the use of a carpet is the fact that it must be fitted to the shape of the room. Where the wall space is

much broken, this means a great deal of work and waste of material, and where there is a border the expense is very much increased and the effect of the room marred. The elaborate gores are extremely unrestful and ruin the symmetry of the design. It would be much better for the looks of the carpet, and would save the purse, if the border were allowed to run past the recess or bay window, and the space left covered with wood-carpeting or filling. Should the carpet with its border be sewed rug fashion into a square or parallelogram, and made six inches or so smaller than the space from wall to wall, it would add to the height of the room perceptibly, and give an increase of dignity to both room and content. A carpet so treated does not become a rug, for it does not gain any of the distinguishing qualities of the latter, but it does acquire something of repose from the straight lines and accurate angles. Those of us who dwell in apartments ought never to commit ourselves to fitted carpets. One treated as described above is not a thing of despair when we are forced to move. It can be taken away and cleaned and laid down in its new home without labor and the expense of fitting and tacking. Nearly all apartments nowadays are finished with hardwood floors. When we do not find hardwood, we can use filling or matting to cover poor boards. Moderately good floors we can stain and wax.

All upstairs halls and corridors should be at least partially carpeted to save the noise of the footfalls. In a narrow hall this is best done by means of a width of carpeting with two or more layers of wadding under it. The very soft, rich effect of carpets in hotels is not due to the superior quality of the carpet, so much as the quantity of wadding placed beneath. Stairs should always be carpeted if there are many feet, especially young ones, to go up and down them. There should be a thick pad on each stair. When it is not easy to obtain the ready-made stair pads, very good ones may be made by basting newspaper over cotton batting.

There are some rooms which should be carpeted all over. One is the nursery and the other is the sewing-room. The carpet ought to be an ingrain. A rug of any kind is not suitable

for either. There is needed a covering of uniform thickness, and one smooth in texture. Matting for the nursery is out of the question on account of the bits of straw which break off and wound the tender little fingers.

MATTING

Matting, once very popular, has, to a great extent, been replaced by filling for use under rugs. It has certain attractive qualities of its own. It is extremely cheap and does not hold dust, though all sand does go through it. It is not the sand which is the dangerous part of dust, however.

Matting should be carefully chosen as to pattern. We will not find aggressive plaids a good background for rugs, while without rugs they are most unrestful. Of all mattings, the Japanese variety is the most pleasing. This is thin, very closely woven, and of delightful green-brown tones, and the occasional geometric pattern of shadow effect of foliage is agreeable to the eye. It costs nearly double what the other does, but it possesses excellent wearing qualities, outlasting the ordinary kind more than sufficient to justify its much higher price.

The cord carpet, which now comes in colors, is most fascinating to the eye, and a charming ground for rugs. Yet, housekeepers are apt to avoid its possession, for it does not allow itself to be swept easily. Shreds and threads refuse to leave it unless picked off by hand.

XV

CURTAINS AND HANGINGS

Improvement in Popular Taste—Lace Curtains—Draperies of a City Window—Curtains in the Country—Blinds—Outside Blinds—Inside Blinds—Venetian Blinds
—Shades—Material and Colors—Fixtures—Portières

UNTIL we are able to treat our windows as fancies simply we must curtain them.

Curtains and hangings, also, bear an important part in the furnishing of a house. There is a pitiable look of bareness and lack of care to unshaded windows both inside and outside of a house, while the wide indoor openings of our modern dwellings call vehemently for drapery to give the effect of privacy. Still, it is quite possible to overcurtain our rooms. We need just enough for grace, not enough to seem as if the fabric absorbed the atmosphere.

IMPROVEMENT IN POPULAR TASTE

One requisite of the modern drapery is the trimness of its arrangement. It must not look sloppy. The curtain of to-day reaches only to the floor, and, if looped, is simply drawn back, not draped in swag folds to take up the surplus. The amount of superfluous material which was once thought necessary for style in curtains has always been a marvel when judged by the standards of taste and hygiene. How many of us remember the yard or so of blue satin and lace stretched out on the carpet, which was the acme of grace in the days before the Philadelphia Exposition opened our eyes to æsthetic values? It was a most untidy-looking fashion, and one possible only in a room which was seldom used. The state parlor has fortunately departed, and its mussy curtains with it.

LACE CURTAINS

Curtains and portières, as a rule, depend from poles without a cornice. Lace curtains, if hanging under heavier fabrics, are

made with a shirr at the top, through which runs a small brass rod fitting into brass staples on the casing of the window. There is seldom any extra drapery at the top of window or doorway. This may be regretted by those who remember the graceful folds of the over-curtain, so often seen abroad, depending from a smaller rod fastened above the casing. Such drapery is not advisable here in our dusty cities, though quite the thing for a country where white lace can hang at a window from September to September without growing appreciably soiled.

Few modern housekeepers buy the Nottingham lace which, thirty years ago, was in repute because it could be done up so successfully. The hardness of the pattern and general effect have thrown it out in favor of the more graceful modern laces and tucked and embroidered muslin. There is a great variety of muslin offered, and ingenuity can add to the list by the use of wash dress goods, while the trimming is a matter for taste alone to decide. There is no law of fashion.

DRAPERIES OF A CITY WINDOW

A city window is often hung with three sets of draperies. The casement curtain goes next to the window, inside the casing. It is a concession to the outer looks of the house, and, except in the matter of quality, bears no reference to the furnishing of the room. In many cases it is deemed better to have all the windows in the front of a house dressed alike. If the casement curtain is of lace, it is usually in one piece, and hangs without folds. If of muslin or net, it may be in two parts trimmed with ruffles or an edging, and is draped black.

The inner curtains belong to the decoration of the room. They consist of a thin material which hangs next to the window on the face of the casing. On the room side are hangings of a thicker fabric. This is either draped back or hangs straight to the floor at the side of the window. In this case a valance of the same usually connects the two across the top of the window. The thin material may be looped back or hang straight to the floor, as is desired. This thinner goods is, as a

rule, white, though it may be of figured muslin. The heavier fabric is part of the color scheme of the room, and must be made use of to relieve or accentuate the wall paper. If the paper is of a decided design, the curtains should be plain and of the dominant color, but if the wall surface is plain the curtains should have the lights of the fabric broken by a pattern. The curtains are the accents of the color scheme.

The texture of these heavier curtains depends upon the general style of the house and room. Very high rooms with wide, tall windows call for much more opulent folds of material than low rooms with smaller openings. The old-fashioned triple-lined damask is now seldom seen, happily; it was frightfully unsanitary and never smelled quite fresh. That delicious freshness born of frequent cleansing is becoming more and more prized as the first of luxuries. Light draperies, however, are apt to lose their color. This is the great drawback to china silk when used for curtains. Where it is desired, however, the color can be restored at home through the use of some of the many dyeing preparations. We have known the green silk curtains of a neighbor's house to make periodic visits to the dye pot during a season, exactly as a muslin curtain would seek the washtub for freshening.

In the city, where light and air are doled out in such small quantities, every ray of sunshine is precious, and, except where heavy draperies are called for by the size or the outlook of the room, the hangings should be light in texture as well as tint. The court-room of an apartment will gain much in light if nothing but white muslin curtains face it. There is a peculiarly luminous effect to fabrics of this character. By rights all drapery should darken, but the breaking of the light by the meshes of the thin white fabric seems to lift the room several degrees in illumination.

CURTAINS IN THE COUNTRY

While the curtaining of a city house has in it a certain element of protection from the public without, in the country curtains are merely a partial shield for the eyes from the light

and a part of the decoration of the room. They should be as simple as possible, and of fabric which can be laundered. No superfluity of material is desired, especially when the windows are grouped. For such windows the curtains may be in pairs looped back on the mullions, or made of a single pair connected with a valance across the top. In Colonial houses the curtains should not be much longer than the window, and be tied back at the sill.

BLINDS

Besides the draperies of the window, which are largely ornamental, there must be some provision made for darkening the room during the day, and for shielding those within from the outside world, which will be easily adjustable. Outside and inside blinds are used, with or without shades, for this purpose, or shades alone or Venetian blinds.

OUTSIDE BLINDS

Outside blinds are of value for darkening the interior, but not manageable when modulations of light are desired. They are also practically useless when the windows are screened. The modern houses are generally built without provision for them. There is a variety of the outside blind sometimes seen in rural districts which can not be too severely reprobated, namely, that which is hinged at the top and opens only at an angle. With blinds of this description the sunshine can never enter, and the sunshine is the one element of sanitation which we imperatively need in our houses. Blinds are for an occasional shield from the light, not for a perpetual obstruction to its entrance.

INSIDE BLINDS

Inside blinds are a much better and more easily arranged shield, both from light and observation, than those hung outside. They are either of the same wood as the casings, when these are in natural finish, or of some contrasting color. With painted woodwork the blinds are, as a rule, in natural finish. Old-fashioned houses show us painted blinds, but they are not

usual nowadays. When expense is to be considered, the inside blinds must be given up, for they add very much to the cost of a house.

VENETIAN BLINDS

In country houses we often see Venetian blinds used. These are shades of wooden slats strung on tapes, which can be so regulated as to lie flat against each other, forming an impenetrable obstacle to the entrance of light (and incidentally of air), or to hang in a horizontal position, admitting both light and air to a moderate extent. These are much less expensive than either inside or outside blinds, and are very durable. They should always be hung outside the casing, not inside, against the window, as they interfere to an appreciable extent with the raising and lowering of the sashes. The greatest objection which can be raised to them is the annoying way they have of flapping against the casing when a breeze of any strength enters the window.

SHADES

As we have said, shades are used even when blinds are provided. They are imperative when there is no other shield, and always comfortable to use, since they are raised and lowered with a touch of the hand. They are also most useful in modulating the light of the high, old-fashioned windows, so often seen in city houses. To some eyes the light from above is extremely trying, and the opaque white or buff of the holland shade is a grateful relief in lessening its force. With the low windows of our modern houses, shades are not needed for this purpose. We have seen windows which, with inside blinds and casement curtains of the lightest net, looked both sufficiently dressed and delightfully airy, while the room could be effectually darkened in a moment.

MATERIAL AND COLORS

When there are no casement curtains in a city house, shades become a part of the outside effect. Shadeless windows are very blank and ugly. It is well to bear in mind, also, that all

the shades in the house must be of the same material and color, and all be raised to exactly the same level, unless we desire to have our mansion look like a face drawn awry with pain.

There have been many attempts to bring the shade into the realm of decoration, but they have finally ceased, and plain, white holland is used as a rule, though cream and buff are sometimes seen. Dark green and blue holland are used for houses which are closed in the summer.

White holland shade is durable, and, if used with a proper amount of care, will last many years. When soiled at the bottom they can be turned upside down. The material will launder perfectly, but is apt to shrink.

FIXTURES

When buying shades it is well to purchase only the best fixtures, particularly for the service department, where the use is the most severe. The homemaker would do well to familiarize herself with the method of regulating the mechanism of the fixtures. It sometimes needs but a touch to convert an obstinate sluggard into an alert and responsive early riser.

PORTIERES

The portière may be used in two ways. It may be merely a break between the color scheme of one room and that of another, or it may be the means of separating one from another when desired. In the first case, the curtains are stationary, are joined at the top, and are looped back. In the second, they slide on poles, the rings being furnished with tiny rollers which play in a groove of the pole.

A portière should be dark rather than light, and of sufficiently heavy material to hang without disturbance by any ordinary breeze. The rules which apply to the designs of carpets apply also to those of hangings. The scheme should be quiet and subdued, and be more a play of color than a marked pattern. There may be a little more boldness of line and con-

trast of color, since the portière hangs in folds which break the continuity of line and mass of color.

When the city house is occupied in the summer, the portières may be replaced with white muslin hangings to match the windows. They must be tied back, however, or they will be only too faithful indicators of the slightest draught.

PART III.—KEEPING THE HOME

XVI

HOUSEKEEPING ECONOMY

Practical Co-operation—The Apportionment of the Income—The Value of Pencil and Paper—The Housekeeper's Library—Bookkeeping—A Few "Don'ts"

PRACTICAL CO-OPERATION

THE amount of daily work in each house depends upon its size and the requirements of the family. If we were wise we would never have houses too large to care for easily with the means at our command. If we were very wise we would make simplicity the aim in our furnishing, and so reduce the daily imperative work. There are some things, however, which must be done in even the smallest, simplest house.

It must be aired thoroughly each morning, and the lower part each night before the family retire. The morning airing is the duty of the maid or that member of the house-workers who is first up and about; the airing at night falls to the share of the last person up.

The porch and steps must be swept each day, and in the city the sidewalk before the house. The living-rooms must be dusted, beds aired and made, and the whole business of dining-room, pantry, and kitchen go on without jar or hindrance. To do this well there must be system in the work required by the family.

Disorder should be banished from every corner, but there are some places which must be always in order, always spotless. The outer doors must be clean, absolutely free from finger-marks, their brass or silver polished, their glass washed, and the curtains and shades whole and scrupulously clean. So, too, the hall can never be upset or dusty, nor the reception-room disarranged. All that part of the house which belongs

to the outer world must be ready for inspection at all times. It is one of the first duties of the day to see that this is so. It is not a matter wholly dependent upon the abilities of a corps of servants. It is the faculty of the homemaker and the co-operative instinct of the other members of the family which come into play.

The neatest house the writer ever saw and the pleasantest one to visit could command the services of but one maid of all work, who did the washing for the family of four as well as the cooking. It was the fact that those four enjoyed the work they put into the home that made the spotless neatness and comfort possible. The great burden and drudgery of housework lie not in the fatigue so much as the desire of the worker to be occupied with something else. In this family the man attended to the furnace, the walks, and the tiny lawn, so timing his rising that his share of the day's work was over before breakfast. The sisters did all the work outside the kitchen and dining-room which did not come into the province of their brother. Nowhere was there more leisure. Every room was in order by half-past nine in the morning, aired, dusted, and brushed. The regular turning out of a special room called for a little earlier rising only, in order that it might be cleared, ready to sweep, before breakfast. They were a family who read much, who bore their part in the social life of the town, whose table was always well appointed and served. It was a model family. One wonderful thing was that there was no grumbling nor complaining. The responsibility of each one left no extra weight on the others.

THE APPORTIONMENT OF THE INCOME

There has been a good deal said in these pages in behalf of study in various branches. We feel sure that no one who has had experience in homemaking can deny the value of accurate knowledge in itself and in the confidence it gives its possessor. If a woman desires to be a real *homemaker*, and not feel herself the oppressed victim of servants, tradesmen, carpenters, plumbers, and the male sex generally, she must

know, and know thoroughly, all that concerns the different branches of her profession. There is nothing which gives rise sooner to suspicions of bad faith in others than the galling consciousness of limitations in ourselves.

In a work of this kind very little absolute technical information can be given. Every day brings changes in the matter of cost. New discoveries and inventions create new conditions and new demands. It is impossible to point out exactly what the experience of others would teach one to avoid, for, while the path of homemaking is in a way broad enough to allow for individuality, it is also hemmed in on either side by a continuous and fairly prickly hedge of "don'ts."

The very first thing taught us by this experience of others is the wisdom of counting the cost beforehand in any enterprise; nowhere more wise than in beginning housekeeping. There are incomes which demand no careful balance, where the question is not what is possible, but what is expedient and desirable. For the generality of mankind, however, a judicious apportionment is eminently advisable. One should survey the demands and decide what must be given up, what postponed, and what exacted as a right. In America the responsibility falls almost without exception on the wife and mother. It is she who decides what the education of the children shall be, who has almost entire care of their rearing, their habits of thought and manners, and who makes their place in society for them. American fathers are a most self-sacrificing body of men as a rule, and submit to almost any amount of inconvenience and discomfort for the good of their children. They will rise early, eat hurried breakfasts, ride in superheated cars, cross cold ferries, give up theatres and amusements, endure, in short, all the hardships of suburban life, to give their families the advantages of pure air, sunshine, good schools, and society, but they seldom have time for the real training and the constant observation necessary.

When the homemaker sets at this work of apportionment, one thing she must bear in mind: no schedule of expenses is wise which does not provide generously for repairs, renewals,

and possibilities. It is the unexpected which may always be expected in housekeeping, and even the very best economists can not spend a given sum twice over.

One finds it stated frequently that in the apportionment one-third for rent, one-third for food, and one-third for other expenses is the proper ratio. This gives food and lodging a very disproportionate share. They bear the relation to life that a foundation does to a building. It is impossible to erect a satisfactory structure without a firm base, but the man who puts two-thirds of his income into food and lodging is like one who has spent so much of his substance on his foundation that he is obliged to roof over the cellar and make a dwelling of it. All the grace and beauty of the superstructure is lacking. Even twenty per cent for rent and twenty-five for food leaves a very cramped margin for the higher and better part of life. Ten per cent for rent and a trifle more for food is a more just division.

It is an excellent plan when beginning housekeeping to keep a daily record of the people who eat in the house during the day, counting each person at each meal as one meal. At the end of the month the bills for provisions, ice, fuel for the range, the wages of the cook and half the wages of the maid who serves the meals will give the cost of the table for the month, omitting the expense of washing the table linen. This sum divided by the number of meals eaten in the month will give the average cost per head for each meal. Breakfast and luncheon are not as expensive meals as dinner, and frequently the greater part of their cost is borne by the dinner of the previous day. It is possible to arrive at the average cost of a meal only. Some meals, too, are much more costly than others, but taking out dinner-parties and other entertainments it will be found that the expense of one day is balanced by the less cost of another. If this calculation is made several months in succession, a housekeeper has a standard from which to reckon when balancing accounts. She has also a fairly exact knowledge of the proportion of expense due to the maintenance of the servants, of guests, and of what

is spent for the family proper. It will save the young homemaker many a moment of suffering from that bewildered sense of mismanagement which is too often her lot in her early days of housekeeping. Then, too, when one knows just where and how the money goes, it is possible to economize with comfort and without a feeling of privation.

Conditions vary so much that there is no exact schedule of expenses of this kind possible, but the results achieved in special cases have a certain interest. On the East Side of New York City there is a lodging-house, maintained as a memorial to three boys cut off in their youth, which gives its inmates three excellent meals a day, well cooked and with variety in the bill of fare, at the rate of six and a quarter cents a meal, paying the cost of provisions and the wages of the cook from this sum with an occasional balance in favor of the house. Here the advantage of scientific buying in quantity reduces the outgo appreciably. Boarding schools and similar institutions where a good table is required allow from ten to eleven cents a meal per head. Here also scientific buying is possible. In a private family the expense runs anywhere from that sum to twenty-five cents. This last amount will allow for luxuries of all kinds and high wages.

THE VALUE OF PENCIL AND PAPER

There are certain things which must be done every day, some of them several times a day, others whose performance occurs weekly or semi-weekly. There are others which can be done any time and may be crowded out of sight. The homemaker should not trust her memory exclusively. The proper use of the pencil and paper is a most valuable aid for both her and her servants. If she is wise she draws up a schedule of the week with the duties of each day set down. This is for her own use, but a similar one prepared for each active helper in the house is also wise. It is no light task to keep in one's own mind the various complications of days out, the maids' washing and ironing, the silver and brass cleaning, not to speak of the sweeping and cleaning of the

living and bed rooms. There are the exigencies of the range as well. When the bread is made in the house there are limits to the usefulness of certain days for other cooking. It is impossible to give more than a general idea of what such a schedule should be. That of each maid would include only her own duties divided into morning and afternoon work. That of the mistress of the house would embrace the divers duties to be performed by each one of the domestics, and those things to which she must personally attend. She should reserve a certain day for inspection of the cupboards and pantries, and have a housekeeping morning in which all loose ends are tied up—the mending of all broken articles of furniture, all the ever-recurring darning of curtains and tidies, the tacking on of the chair gimp which has just begun to pull off, the pasting on of fresh bits of paper where the wall has been marred.

These are all things which need only a few minutes for execution, but which, if they have no appointed time, get no attention. It is the neglect of such things which is bad housekeeping. If put in order at once, when the break occurs, there is practically no harm done. If neglected the little rent becomes an unsightly hole, the gimp frays out irremediably, the paper rubs off, the chairs and tables become decrepit and either are thrown away or must visit the cabinetmaker. If “Inspection Morning” met one’s eye in looking over the list of daily duties, there would be a settled time and the things would be done. It may here be noted that finger-marks on the woodwork can not be left for “Inspection Morning.”

Belonging to the schedule is the memorandum slip. The housekeeper and every maid and active helper in the house should have a pencil and a pad. The time spent in actual housekeeping is much reduced thereby. The housekeeper sets down the things she wishes attended to, and each maid the things her work calls for. The daily tour of the housekeeper through the house then becomes a kind of clearing house, and there should be no further calls upon her until the next morning. It is the excellent practice of some housekeepers to write

out the menus for the day each morning in duplicate, for cook and waitress. These written, and the resulting orders given to the tradesmen, her mind should be free from all care as to food until the next morning.

It is not only the woman who must put her desires on record for the guidance of her domestic helpers who gains from the pad and pencil habit. It would be an immense relief to the housekeeper, who is independent of outside aid, in systematizing her work for the day. One so often hears the housekeeper complaining that she "has no brains left." She feels that inability to concentrate her mind which is the result of carrying on too many and diverse trains of thought continuously together. If one of these "no-brains" housekeepers should at night conscientiously set down in connection with the next day's demands all the minutiae concerning each, she would find that on the succeeding day she could take up one duty after another, giving each her undivided thought. It would be a great rest and a real source of mental development. If we as women are supposed to have brains inferior to men, it lies solely in the unsystematic habits of thought fostered by ignorant and unreasoning housekeeping.

It is also a good plan when there is some particular duty which does not come into the ordinary range of a maid's work to write this out and pin it up where it will catch her eye as she goes about her duties. Changes in the meal hours should always be written down, particularly when there are several servants whose customary routine is thereby upset.

The pad and pencil will be found a great aid in keeping accounts. With every item set down at the instant the expense is incurred, there can be no difficulty in posting them in the book at the end of the day, and no chance for a forced balance.

THE HOUSEKEEPER'S LIBRARY

This is hardly a library, more a collection of books. It includes the various cook-books old and new which have commended themselves to the housekeeper, her own manuscript cook-book, and a scrap-book. To this collection also belong

the various periodicals which she can command. There are a score or more magazines which have to do with the home, filled with helpful suggestions of all kinds. The Sunday papers have a woman's column, sometimes furnishing practical and newest hints for housekeeping. These publications should be carefully scissored, and the receipts tabulated. Such a scrap-book is a wonderful aid to the caterer, and not less to the house-cleaner.

BOOKKEEPING

There is another set of books which belongs to the housekeeper's collection: her account-books; not her *account-book*. It takes a set of books to keep the expenditure of a house properly. She should have a day-book or journal, in which every expenditure of the day is set down. She should have a separate account with every member of the family and each domestic, as well as a book for her own private purchases. Every cash expense appears on the day-book, which must balance with the cash in her purse. Each item appears also in the book belonging to the person concerned. There are two more books needed—one for totals for the housekeeping and one for totals for the family. These should be posted every month. When the housekeeper has a bank account, the thing seems more complicated, but it is really very simple. Checks do not go on the journal, but appear in the private accounts and in the totals for the month. Only the actual cash in hand appears on the debit side of the journal. All the cash as well as the money in the bank is entered on the debit side of the "Totals for the Family," in which the total for the month's housekeeping appears as an item. On the debit side of the other books, supposing the money comes from one member, is put only the sum of the expenditure, entered as "transferred from cash" and transferred from check-book. This is also the case with the book of housekeeping totals, the real balance showing only in the "Totals for the Family."

Thus in the totals for the housekeeping for the month would appear the amount spent for meat under one head, that for

groceries, for green groceries, for amusements, etc., and the proportionate expenditure can be seen at once. There should be a separate entry of any extra expense entailed by entertaining, under its own name, as "special expense for dinner on the Fourth." This includes all dainties which would not have been furnished for the home meal, as well as extra service, flowers, etc.

SPECIMEN PAGE OF JOURNAL

DR.			CR.		
May 1	To cash on hand.....	\$100 00	May 1	By wages, waitress..	\$20 00
				" cook.....	20 00
				newspapers	1 55
				locksmith.....	85
				carfare.....	20
		43 35		mending silver...	75
		<u>\$56 65</u>			<u>\$43 35</u>
					56 65
" 2	" cash on hand.....	\$56 65	May 2	By dress making	
				findings.....	60
				" gloves for Chas...	1 00
				" gloves for self	1 50
				" veiling " "	60
				" handkerchiefs "	3 00
				" carfare.....	20
				" vegetables.....	80
				" groceries.....	2 60
				" extra help for	
		25 30		"day at home"...	5 00
		<u>\$31 35</u>		" ice cream, etc.,	
				"day at home"...	10 00
" 3	" cash on hand.....	\$31 35			<u>\$25 30</u>
	Drew from Bank	50 00			31 35
		<u>\$81 30</u>			

SPECIMEN PAGE OF PERSONAL ACCOUNT

			DR.		CR.	
				May 2	By Gloves.....	\$1 50
					" veiling.....	60
					" handkerchiefs....	3 00
				" 5	" dressmaker (chk)	23 00
				" 7	" wedding present	
					for D.....	12 00
				" 15	" gloves	4 00
				" 22	" club dues (check)	5 00
				" 27	" foreign missions.	3 00
May 31	By transfer from					
	check-book.....	\$28 00				
	" cash exp'diture	24 10				
		<u>\$52 10</u>				<u>\$52 10</u>

SPECIMEN PAGE OF CHILDREN'S ACCOUNT

		DR.		CR.
			May 2 By shoes for Charles	\$1 00
			" 3 " dentist Mary (check)	5 00
			" " cloth'g at Best's for Mary (chk)	15 00
			" " Clothing for Charles (chk).	18 00
May 31	By transfer from check-book.....	\$38 00	" 7 " gloves for both..	3 00
	" cash expenditure	12 00	" " hat for Mary.....	6 00
		<u>\$50 00</u>	" " " Charles..	2 00
				<u>\$50 00</u>

SPECIMEN PAGE HOUSEKEEPING TOTALS

For May

		DR.		CR.
			By meat (check).....	\$40 00
			" groceries (check).....	30 00
			" " (cash).....	10 00
			" ice (check).....	3 00
			" gas "	5 20
			" rent "	30 00
			" extra washing.....	3 00
			" wages.....	40 00
			" amusements.....	7 00
			Day at Home.....	15 00
May 31	Transfer from check-book.....	\$108 20		
	Transfer from journal.....	75 00		
		<u>\$183 20</u>		<u>\$183 20</u>

SPECIMEN PAGE OF TOTALS FOR FAMILY

		DR.		CR.
May 1	On hand in bank..	\$300 00		
	Cash in hand	150 00		
May 15	Deposited in bank	200 00		
		\$650 00		
		285 30		
		<u>\$364 70</u>		
May 31	On hand in bank...	314 00	May 31	By housekeeping
	Cash on hand	50 70		" personal account
		<u>\$364 70</u>		" children's "
				<u>\$285 30</u>
				<u>364 70</u>
				<u>\$650 00</u>

Books so kept are most useful as records. If there is need for retrenchment it is in the items of expenditures that we find the place in which to retrench easily and judiciously. There

is another thing. Perhaps all housekeepers are not aware that it is by the account-book that we test the real value of the service in our home. It is not always to be seen in the wages. A poor servant at a low price is often more expensive than a good one at higher wages. In our own experience the fit of economy which induced the engagement of a cook for five dollars a month less than the former one sent the bills up fifteen dollars in the first month, with a perceptible loss in the quality of the food. The same is true of every other department of housekeeping. But this can be learned only through careful bookkeeping.

A FEW "DON'TS"

There are a few "don'ts" which a homemaker should always bear in mind.

Don't forget that thoroughness prevents unnecessary work.

Don't forget that neglect in any department is extravagance.

Don't forget that housekeeping is not an end but a means to an end, and that end the comfort of the family; and under any circumstances

Don't allow yourself to become possessed with a clean-devil, or you will find that enjoyment will be sought out of the home, not in it.

Neatness is obligatory in all parts of the house, but formal order is a necessity only in those portions to which the outside world has access. It is fortunate if in the house there is some room which the men of the family can call their own, a room which though harmonious in color and furnishings is not too fine for daily use, with furniture that will stand wear; comfortable chairs, a commodious writing-desk, large, firm tables; where tobacco is not tabooed, a place where a man can read his paper undisturbed by the cheerful voices of his family, and scatter its sheets at will. The masculine necessity for relaxation in the home is not always comprehended by a woman. She never relaxes except in her own room, and not always then. She lives in her workshop, and must be prepared

for any call upon her. A man turns his back on his business and is able to free his mind from the strain of the day. He hates his dress suit, for it means the tension of society, and he hates the formal parlor for the same reason. What he needs is his own place. There is no doubt that the average man, if truthful, would confess that though he was proud of his wife's housekeeping, he was never thoroughly at home in her house.

XVII

FOOD ECONOMY

Food Values—Food and Digestion—Preferences—Eating between Meals—Wise Economy
—Foreign Fashions in Catering—Easy Cooking—Marketing

MAN is a machine, and a self-repairing machine as well. We must put into that machine such substance as will produce the heat and force to run it, and also such as will provide for the growth and repair. We must, as well, furnish certain articles which aid in running the machine—the oil on the bearings, so to speak; such things as promote digestion and conduce to a perfect action of the digestive organs.

FOOD VALUES

Between stimulants and foods there is a difference which must be understood. The apparent revival of strength which follows the eating of hot soup or drinking of coffee, tea, and wine, is due to the increased action of the circulation of the blood and consequent toning of the muscles to renewed exertion. Each has its special effect upon the organs of the body, but that is not the main purpose of our drinking them. They do not repair waste, but they act as spurs and whips to sluggish powers. Coffee has a direct action on the liver, tea is of some advantage in preventing an over-assimilation of the food eaten, and all forms of alcohol quicken the muscular action of the digestive tract, besides stirring up the blood-vessels. As a matter of fact, we are the weaker for the action of these stimulants if they are not made use of as aids to digestion.

This does not mean that these things are good when combined with eating. The peoples with whom eating has become a science have separated the beverage from the meal. Coffee and tea with them are drunk with the smallest amount of food possible, as a preparation for a real meal which is to follow, in order to afford a rest to the system, so that later the diges-

tion will be in order to enjoy and assimilate the food offered it. This is the principle on which so many men indulge in cocktails before eating. They feel the exhaustion consequent on the hurried life of to-day, and realize the danger of forcing food on a fatigued system. In so far they are right, but they run a worse danger. They may fall into the habit of spurring up an appetite which is not suffering from fatigue of body and mind, but from previous overfeeding. The five o'clock tea of England, and the afternoon coffee of Germany, are much better preparations for the late meal of the day than our American cocktail, while the soup and highly seasoned oysters which begin our dinners are spur enough to a healthy appetite.

There is but one form of food which combines both the growth and repair and the heat and force principles—milk. For children and invalids it is the ideal food. It is not a diet suitable for adults. Its simplicity and the lack of the variety craved by our spoiled palates produce loathing in a short time, while its lack of waste matter is a serious hindrance to the digestive action when a sedentary life is led. Moreover, it must be absorbed at frequent intervals or we are really underfed. The next in value is bread, but not even bread will furnish all the substances necessary for the human system.

We need a combination of albumen, starch, fats, or sugar in each meal, or rather in each day's provision, as well as a certain proportion of vegetable food. That is to say, the combination of the growth and repair, the heat and force, and the cleansing substances of which we spoke.

No one form of food is composed of one kind of nutriment exclusively. There is always a variety of principles united, but, if separated according to their predominant characteristic, we find, under the head of growth and repair, meat, fish, eggs, milk, beans, peas, lentils, cheese, nuts, mushrooms. Fats, sugar, and starchy vegetables, such as potatoes, rice, corn, cereals, tapioca, and sago, supply heat and force. The foods which we eat simply for the benefit of the machine are the vegetables low in starch, such as cabbage, turnips, parsnips, beets, celery, green beans, asparagus, eggplant, artichokes, tomatoes, squash,

cucumbers, and all kinds of fruits. These all possess a certain amount of nourishment, varying very much in individual cases, and they are all made more or less nutritious by the sauces and seasoning with which they are served, but the value to the system lies in the acids and other properties which reinforce the gastric juices, and in the large proportion of waste matter which stimulates the muscular action of the intestines. They are many of them scourers, and aid materially in keeping the intestines clean.

We can not live for any length of time without the growth and repair foods. They are absolutely necessary to existence. We may prolong life without the heat and force foods, but it is at an expense of great waste of the tissues. Without the vegetables and fruits of the third list, it is hard for the system to keep the blood pure and the functions natural. It is not difficult to combine them in the day's provision. It is the knowing what and why that is necessary.

FOOD AND DIGESTION

Food in the concentrated form is a mistake. If the nutriment is distributed in a sufficient amount of fibre it carries the process of assimilation along the entire digestive tract. By means of the prolongation of the process, the material is gradually absorbed and taken to the liver. This is the laboratory of the body, where the material absorbed is split up into its various elements, the rejected constituents carried off, and the rest returned to the blood ready to feed the muscles and furnish the heat and power of the system. A too concentrated form of food sends the nutriment too suddenly to the laboratory. Too much of one kind overtasks the power of the liver. It needs all the various elements of food combined to make pure rich blood.

That the digestion is largely dependent upon the quality of blood which feeds the digestive tract is a fact not always appreciated. These tissues are nourished by the same blood which takes up and absorbs the food. If the blood is poor, or too heavily charged with one kind of material, it does not feed the digestive organs properly, and the digestive juices are not

secreted in sufficient quantity or strength. Indigestion follows. The food putrefies instead of being digested. The poison of the putrefaction is absorbed instead of the nutriment which should have been there. The vitiated blood passes to the laboratory, which is unable to care for it properly, and sends it on to the muscles and the lungs. The muscles are neither fed nor strengthened. The lungs are not able to dispose of all the waste by the consumption of the oxygen in the air breathed in. The poison permeates the entire system, and rheumatism, anæmia, catarrh, and a host of other ailments follow, not to speak of the breeding ground prepared for any intrusive bacteria which may come in our way. The individual may have prided himself on his strong digestion all the time. Active inconvenience is not the only sign of indigestion.

This same result may follow upon a too great dilution of the gastric juices through immoderate water drinking at meals. Not infrequently it is accompanied by an increase of fat. It is a well-known fact that liquid at meals tends to the accumulation of fat. One part of the process of fattening pigs for market is the enormous quantity of water given with the food.

We must never forget that no one kind of food will furnish all the nutriment required. Cereals and vegetables, the most valuable constituents of our diet, may become absolutely harmful unless mingled with meat or similar substances.

And we must bear in mind that it is quite possible to grow fat and weak at the same time.

In fact, a tendency to fat should always be looked on with suspicion. It is a sign that more nutriment is being accumulated than the muscles can eat up in their daily exercise. There is, of course, an increase of weight which does not mean fat, but muscle. The owner knows the difference well enough, and the difference in feeling which accompanies it. In the former case there is a growing tendency to laziness, and a dislike of all kinds of exertion, mental and physical; in the other an alertness and vigor which is not confined to the limbs merely, but which shows in the thoughts and mental energy. An undue proportion of fat can also be told

by the part of the body to which it attaches itself. The size of the waist is not a fair indication. Exercise and deep breathing will make the waist larger by a couple of inches. They never add an inch to the measure of the hips and abdomen, however. The first indication of an increase of girth around the hips in man or woman should be looked upon as a warning. Too much hydrocarbon is being introduced into the system for the muscles to take care of, or else the muscles are not getting fair play in the consumption.

That fat means, in a short time, dyspepsia, is also well known. The homemaker will do well to watch her charges, and, with a sudden increase of weight in a member of her flock, cut off starchy foods for a time.

PREFERENCES

In the day's provision ceaseless care and attention are involved. The homemaker, studying the effect of foods on her family, must vary the diet to suit the various needs. No regimen can be laid down for ordinary eating. One person may starve on what another thrives upon. The homemaker must know what her charges can eat, and what they need.

She must also guard them from too great indulgence of their likings. As we have said, too much of one kind of eating is not fair treatment to our digestive organs, and viands which we like we are apt to eat with less moderation than those which do not especially appeal to us. A favorite dish should be a treat and not a stand-by.

"You have come to this state gradually, and through your habits of eating," said a skilful physician to a patient who had consulted him for an acute attack of rheumatism. "Of course, all starchy foods and sweets are poison to you now, but I can give you but one rule as to diet. Do not now, nor for six months to come, eat of any dish of which you are fond. I can not tell just what gave you rheumatism, but I do know it never came from over-indulgence in food you did not like."

It must also be borne in mind that different kinds of occupation require different foods. The consumption of the tissue,

through muscular or nerve action, varies very much according to the kind of work. Outdoor workers need muscle and heat foods, and exercise in their case may be trusted, to a great extent, to accelerate the digestive action. Those who lead sedentary lives, who work with the head more than the muscles, require a greater proportion of fruits and of the vegetables which possess little starch, in proportion to the starchy foods.

We must not forget, too, that there should be a certain concession to years in the matter of quantity of food consumed, as well as of the kind. The active hunger of the growing child, which is not stilled until succeeded by a sense of fulness, sets for the adult a standard of satisfaction in eating. But with the adult growth is over, and repair does not make the same demands upon the system. If we of riper years eat for the childish feeling of satiety, we do, indeed, eat too much. Much less than repletion will suffice to repair damages, and give us heat and force enough for our work. The result of overeating is cumulative, and not to be easily undone. We do realize eventually that we must change our scale of appetite, and put into the furnace no more than it will consume. This is, alas, a matter which must be left to the individual to acknowledge and act upon. The homemaker can but provide what is suitable; she can not govern the eating of the adult further. It might be well if she could.

EATING BETWEEN MEALS

When the regular meals are full and varied, a habit of eating between meals is an indication not of hunger, but of nervousness. This can be distinguished from real hunger by the kind of food it demands. To the ravenous boy who raids the pantry a crust of bread is as delicious as, and much more satisfying than, cake. It is when sweets and delicacies are demanded that we should know that something is wrong. Such a warning should be heeded. "I wish I had something good to eat" is a distinct danger signal, and the homemaker must not disregard it. A dose of physic will not only bring renewed

activity to the sufferer, but also a marked decrease of appetite. When there is this tendency to over and unseasonable eating, the diet should include fruit without stint, and vegetables of all kinds. And the homemaker must enforce exercise daily and in generous amount.

Very young children should, of course, eat much oftener than grown people. These are regular meals, however, and do not come under the head of nervous eating. This dietary is treated in the book on "Home Nursing and Motherhood."

WISE ECONOMY

The homemaker should study economy as well as the balance of food values. But there is a wide difference between parsimony and economy. We can not repeat to ourselves often enough that saving is not, in itself, economy, but that a judicious expenditure is. To cut down the butcher's and grocer's accounts may reduce the household expenses, but it may be a rank extravagance all the same, requiring doctors' bills and costly journeys to make up for the damage done. If the homemaker markets with scientific knowledge of the food values of the articles she buys, balancing the properties of one against another, eschewing costly luxuries, she practices a wise economy. The guarding of the cent or two more here or there is not imperative. With such things as game, early lamb, forced fruits, and other unnecessary delicacies omitted, it is not important to try to balance prices on the day's outlay. It is the consensus of opinion among experienced housekeepers that in the average the cost of one kind of provisions will balance that of another. When we find an appreciable reduction of the butcher's account, a corresponding amount will appear on the grocer's bill. One housekeeper declared that "the pendulum swung in that regard according to where she bought her hams."

The homemaker must consider that meat soups are not foods, as cream soups are. Custards, rice, and other puddings are foods, especially when accompanied by a butter-and-sugar sauce. Sliced fruits and berries are aids to digestion, but they

become foods to an extent by virtue of the cream and sugar one eats with them. If, by reason of the exigencies of the situation, or the failure of the wandering butcher's cart to appear, the homemaker finds the supply of meat for the day's dinner scanty, the lack of nitrogenous food should be made good by the addition of peas, beans, or lentils, either in soup or otherwise prepared.

One may do away with potatoes, for a time, provided the starch the system requires is furnished by rice or some form of cereal.

To sum the matter up. That is wise provision which combines the viands, with due regard for their qualities. That is economical cooking which puts such food before the consumer in such a state that its best qualities are ready for assimilation, and yet which pleases and piques the appetite.

That is unwise provision which overloads the system with foods of the same properties at one meal, however well prepared they may be. That is wasteful cooking which serves good food in uneatable form, which does not do its best with the materials at hand, and enable the consumer to profit by what nutriment the articles contain. This may be the result of mere carelessness. It is oftener a sin of ignorance, of which no homekeeper should be guilty. We have alluded before to the need of the homemaker to study. This, the scientific value of different foods, is particularly her province. It is not a thing which may be mastered once for all, either. There are always new discoveries, and the results of recent experiments being published. The homemaker must keep herself informed as to what is going on in her special domain.

FOREIGN FASHIONS IN CATERING

There is an increasing tendency to simplify the first meal of the day in this country. The heavy American breakfast, so long the scoff of all foreigners, is disappearing, and the lighter foreign fashion being adopted. Coffee and rolls varied with eggs, fruit, and cereals are more often to be found on our breakfast tables to-day than the meat and potato of former

times. The change is for the better in most cases. One needs enough food in the morning to keep the machine running only, not so much that the blood is called from all parts of the body to manage the digestion. Nor do we need a heavy meal in the middle of the day. A light luncheon is to be preferred to a feast, if work is to be done afterward, especially if that happens to be brain work. Who does not remember with acute sympathy for the former self the awful struggles to keep awake during the afternoon school session, after a heavy dinner eaten rapidly and well shaken up through the hurried return to school?

Many people who use the brain exclusively in their work omit the first meal entirely, or content themselves with a single cup of coffee. One real meal a day is enough for any of us. For children who must be early abed this should be in the middle of the day. But for all workers it should be at night, when the work of the day is over, when there is leisure to eat and serve it properly. It is not the quantity of food which makes a dinner. A little eaten quietly, without hurry or nervousness, is worth more to the system than much devoured in haste. It is the serving and the skilful combination of food which constitute a dinner. Otherwise, as our English friends say, "We stoke, but we do not dine." The bill of fare should include a soup. Its place in the scheme of a dinner is conceded in virtue of its value as a stimulant to the digestive organs more than for its food value, as we have already pointed out. It calls the blood to the stomach, and prepares the secreting tracts for action. Meat should form a part of the dinner, and vegetables, including a salad. A sweet dish should follow. The sweet is as valuable to the system as the fat of meat. This is the dinner of the healthy individual who works and exercises properly. The dyspeptic must diet, the lazy man suit his food to his life.

It is from the French that we learned the art of serving in courses. We have not yet learned their skill in combination, however.

On this side of the water we do not consider mastication

sufficiently in forming our bills of fare. We serve together all kinds of things which require different methods of chewing. A French or Italian dinner is so divided that those things come together which may be masticated alike. Their meats come alone, with only the slightest garnish of vegetables, and the vegetable of the meal, which requires an entirely different amount of mastication from the flesh fibres, comes alone.

Nor do we consider the texture of food as regards mastication. It is easier to overeat with soft foods than with those which require much chewing. They are swallowed more quickly, and the stomach demands more, in proportion, to produce a feeling of satisfaction. Hashes, minces, croquettes, all forms of cooked eggs, have much less effect on the appetite than the same amount of nutriment in a more fibrous form. It is a continual surprise to some people that they can produce dyspepsia by the consumption of some kinds of easily eaten food when meat does not disagree with them.

It is said that only sufferers from dyspepsia are keenly alive to the needs of diet, and that the diets proposed by them are those only which are suited for their own case. It is perfectly true that until we suffer we see no need for care. It is only when the retribution for our sins is on us that we become keenly alive to the pernicious influence of sweets and starch, and have a sensitive conscience as to drinking with our meals. But it is the responsibility of the homemaker to look at the question from so scientific a standpoint that she can provide a properly distributed diet without having suffered herself, and which will prevent her family from so suffering.

There is another quality in the foreign dinner which we might do well to imitate. It is so balanced and served that it is not possible to overeat. One begins with faith in the caterer. The amount cooked is exactly divided; there is no second helping possible. One success eaten and appreciated makes way for another success, which in time is followed by a third. When the meal is finished, there is a sense of satisfaction, but no feeling of repletion. The dinner may be in three courses,

or ten. The result is the same. As the courses multiply, the portions become smaller, and each article is chosen because of its relation to the other food provided. One viand supplements, corrects another, or is introduced to bring out the full flavor of another.

We may also learn much from these—the two nations mentioned—in the preparation of food. The mere application of dry or damp heat to a substance is the smallest part of cooking. Our foreign friends take endless pains to make the food ready for cooking. A beefsteak is not considered prepared for the gridiron until it has been soaked in olive oil and rubbed with lemon-juice. Claret, which is put into a sauce, is first warmed to bring out the whole flavor. On their one vegetable they put as much time and care as we do on our three or four. And the result! The smallest inn offers us a savory meal whose cost to the landlord is far less than the uneatable stuff put before us in our smaller country hotels. Who would not prefer the single dish of string beans of the French menu, every morsel delicious, to the array of corn, beans, potatoes, beets, tomatoes, and cabbage, spread in tiny dishes around our plates, not one of which can be eaten without a mental reservation, and not one of which would not have been appetizing if well prepared? We might easily have less and have it better, gaining an increase of pleasure in the eating, and obtaining a diminution of the expense.

EASY COOKING

One snare awaits the homemaker which is often unsuspected. That is, *easy* cooking. This means, in the long run, the sacrifice of much which we need from food, and, in the course of time, a disrelish of really valuable viands.

There was a time when the staple form of meat in an American family was beefsteak. The cook books of twenty years ago inveigh loudly against the practice. But, in the domestic economy of the family of moderate means in a small town, chops and steaks held their place as staples of diet, because of the short time needed to cook them. They were

time-savers. Twenty minutes only was needed for their preparation. Roasts required an attendance of an hour or more at the fire. In consequence of this sameness of diet, on every American table appeared pickles, catsup, and Worcestershire sauce, condiments demanded by the appetite on which the charms of beefsteak and chops had palled. Yet, what was saved in time was lost in money. Beefsteak is a very expensive form of meat. Chops are even more so. There is less nutriment on a chop, to the price paid, than is the case with any other form of meat. We should not grudge the time required for the preparation when it is really a saving to the purse, as well as a relief to the appetite, which we gain.

MARKETING

Marketing is a duty which is not always a pleasure to the homemaker, and for various reasons. One is the inconvenience, we may say impossibility, of leaving the house early in the morning. Some women seek to save themselves for their family at this time of the day by ordering from the men sent by the butcher and grocer. It is not a satisfactory expedient. Their calls seem always timed for exactly the wrong moment, and the ordering must be done under the eye of the cook, and to a certain extent with her consent. It is also a very unsatisfactory way to provide. There is an advantage in going one's self to market which the homemaker should not neglect. The choice is larger, and the suggestion of ideas, through seeing what the shops and stalls offer, is valuable. Also, though butchers are by no means the worst of men, nor the most unscrupulous, there are temptations in their trade which are greater and more omnipresent than those in other callings. It is well to see one's piece of meat cut and trimmed, and have weight and price recorded in the pass-book. There is something as well in being on the ground. The second cut of beef will often be sent to the absent purchaser, when she could have had the first had she been on the spot to demand it. And if both weight and price are in her book she has the comfort-

able consciousness that she is not paying her neighbor's bills. Memories are proverbially treacherous as to small amounts, and weights and prices may well become mixed in the butcher's mind and his book in the rush hours of the day.

What is true of meat applies to vegetables. One should see what one orders. There is always a choice of freshness and price if one is on the spot.

Yet meat, vegetables, and salads should be in the hands of the cook and waitress early in the morning, if the day is to be used to advantage.

How can a conscientious woman, thus drawn two ways at once, satisfy both claimants for her time and attention? A very good housekeeper solved the problem for herself by buying always a day ahead of the needs. When the duties of the house were accomplished, she went to market and bought for the succeeding day. Groceries could be delivered late that day, and meat and fresh vegetables early in the morning, when the man went his first rounds. The menu for the next day was given to the cook on the return from market. There was a saving in her own time. The clerks had the opportunity of waiting on her at once, and she was spared the annoyance of waiting for an undecided customer, who had preceded her by a minute or so, to hesitate in painful uncertainty between the claims of green peas and string beans or veal and beef. This is also much the easier way for the woman who does her own work to market. With the house in order, and the materials for the meals of the day prepared, she can take her time and shop leisurely.

When there is a very small margin for extras, the homemaker may find the study of the market reports in our daily papers useful. There are often reasons why some article is, for a time, unusually cheap or dear. That is the time to purchase or avoid that particular article. The paper prices are always a little lower than the homemaker will find them at her butcher's or the uptown market. That is partly due to the rent, and partly to the cost of handling.

There are a few hints as to the purchase of meats and

vegetables which may be of advantage to the young housekeeper.

For one thing, the most expensive cuts are not the most nutritious, of necessity.

Second, skill in cooking can dress the less popular cuts so that they will be as palatable as the others.

Third, by the exercise of skill in buying it is possible to have choice cuts of meat at moderate prices. The filet of beef, a delicious dish, if larded and served with the proper sauce, sells in the market for from seventy-five cents to a dollar and a quarter a pound. It is solid meat, with no bone to rob it of weight, and is sufficient for a dinner for from eight to ten people. But the price! Now, the whole aitch-bone piece, which has the filet on one side and the sirloin on the other, sells for from twenty to twenty-two cents a pound. The sirloin itself will cut into two good roasts. If the whole is bought at once, the butcher will keep the cuts not needed until wanted. This is three large roasts for the price of the filet alone. With a large family there could not be a better economy, unless perhaps the following idea. In this case the gain in quantity of meat is much less, but the price is much lower.

When buying a rib roast, the first cut only is profitable. As the ribs run up to the shoulder, there comes a thick muscle which divides the flesh. The outer portion, which has some fat on it, and is always too well done if cooked, is invariably left on the plate. This is a clear waste of meat which costs twenty cents a pound. The round piece, called the "eye," between the muscle and the ribs, is the best part of the animal. If the whole five last ribs are bought, the cut sells for from eleven to thirteen cents a pound, according to the locality in the city. If the whole is bought, and the "eye" taken out, the economical housekeeper has, at a very moderate price, an excellent roast, five rib bones for her soup at only a cent or two more than she would pay for the shank, and a piece to corn for future hash, or as the accompaniment to a dish of cabbage. The "eye" may be larded and served with a sauce as a filet.

By many it is much preferred, since the flesh is firmer and better flavored.

As to lamb, the forequarter is, in our experience, a much more profitable cut than the hindquarter. It also is much cheaper. The shoulder-blade should be taken out for the soup pot and the space filled with stuffing, which adds much to the flavor of the meat. This is not a dish to set before a young man who has for long years subsisted at restaurants, for its alluring cheapness has probably induced its consumption *ad nauseam*.

In buying pork the city housekeeper, who has long known the charms of the spare-rib and roast of pork, may not be aware that the fresh ham, boiled and then roasted with cloves stuck thickly on the surface, is a delicious dish when hearty food is required.

While only the white hearts of lettuce and escarole are suitable for salad, the green leaves need not be wasted. They are the base of a cream soup, or can be made to help out the spinach of the day. With spinach at forty cents or so a peck, and lettuce five cents a head, this is a real saving. It is sometimes well, in buying, to substitute lettuce entirely for spinach. The flavor is decided and acceptable. When one has a garden this is a good way to make use of the lettuce plants which have outgrown their tender youth, and also to obtain a little variety for the table in a time when the garden is not very productive.

Peas which are too hard and old to eat are in just the right condition for the soup pot. The pods of young peas make uncommonly good soup.

Ripe string beans and butter beans are delicious if baked with salt pork in the manner of dry white beans.

In buying vegetables in the winter, it is well to remember that fresh string beans are profitable, there being little waste, while canned string beans are not to be depended upon. With the exception of those put up in glass, the stringing is apt to be neglected. The kind referred to is very good, but also very expensive.

Fresh peas, on the other hand, are in winter a very un-

profitable investment. The quantity of peas is small to the peck, and the pods are too dry to be available for soup. There are canned peas on the market at a very moderate price, which have exactly the flavor of the fresh vegetable.

Marketing is not only an art, but a profession. The marketer must be always on the alert, and able to compare the experiences of one day with those of another to her profit. Nor need she grieve over a few failures in the early days. Experience is proverbially costly, yet it is the teaching that makes a lasting impression.

A word as to the soup pot. Science has proved, very much to our regret, that beef tea or bouillon is but little more than an agreeable stimulant.

There is a certain amount of nutriment to be extracted from bones, however, which, with the vegetables and the thickening, makes of soup a food as well as a stimulant. The bones of all kinds of flesh, though, are not suitable for soup on account of the flavor. Bones of beef, mutton, chicken, and turkey make good soup. Ducks, geese, and game are too strong to use. Fresh bones, with more or less meat on them, are, of course, the best, but the bones of roasts and the carcasses of cooked fowls also belong in the soup pot. So do the bones of the beefsteak and broiled chops. All bones which have been cooked, however, must be carefully scraped to remove every particle of burned substance, or the soup will be spoiled. Good cooks also take great care to remove the fat from all scraps, especially in summer. The fat rises to the top and hardens in cooling. It makes no part of the soup. But on account of this fat the soup can not be eaten until it has thoroughly cooled. This makes the preparation of soup as a rule extend over two days. But if the fat is carefully removed and the pot put over early in the morning, an hour or so of cooling and a short sojourn on the ice will be sufficient to send to the top the very little fat which will remain in the fibres of the muscles.

XVIII

THE CARE OF ROOMS AND CLOSETS

Daily Care of the Bedroom—Care of the Bedroom at Night—To Clean a Room—Care of Carpets—Carpet Mending—Care of the Linen Closet—Care of the Bathroom—A Few Timely Remarks

DAILY CARE OF THE BEDROOM

IT is the duty of every person to turn back the bedclothes on rising, and to open the window before leaving the room. This is not only a common courtesy to the bedmaker, who should not be obliged to enter an unaired room if its atmosphere has been exhausted by the sleeper or to inhale the odors of an unaired bed, but is necessary to preserve the bedclothes from becoming polluted with the emanations from the skin of its occupant. Every person loses from one to two pounds of weight at night. This is to some extent thrown off by the lungs through the deep inhalations which take place in sleep, but the greater part escapes through the pores of the skin. This waste will be absorbed by the bedclothes if they are permitted to cool unaired. Such bedclothes soon have a close and unpleasant odor, only to be removed by washing. The routine of chamber work is as follows: The maid brings in with her the slop-pail and two towels, distinguished from each other by their pattern; also a wash-cloth for the chambers and a pitcher of hot water. The articles for the chamber set should not be carried to the bathroom for emptying or filling. More chipping and breaking are done in this way than any other.

The first maid takes off the bedclothes one by one, and lays them over two chairs by the open window, together with the pillows and bolster. Then she turns back the mattress over the foot of the bed. When circumstances permit, mattress, pillows, bolster, and blankets should be sunned in the open air. City life seems to offer few opportunities for thorough airing, but in the country the bed furniture ought

to go out on the lawn or on the piazza roof at least two or three times in a season, the blankets meanwhile hanging on the line. There is a perceptible lightness in the blankets after such an airing, while the mattress and pillows seem not only much sweeter, but infinitely softer. This airing can very well be done while the turning-out of the room takes place. While the bed is left to air the maid attends to the washstand. She empties the slop-jar and chamber, rinses with hot water and ammonia, and wipes them dry with a towel kept strictly for their use. Sediment in the chamber should never be allowed to accumulate. It can be removed with hot water and a touch of sapolio. If the commode has a close, unpleasant odor, disinfectants must be used in the chamber and the inner surface of the commode wiped occasionally with turpentine. She washes the soap-dish and mug, and wipes out the pitchers. If it is a standing bowl she wipes the marble dry and polishes with witchcloth the metal fixtures, not forgetting the nickel-plated pipes and legs. She folds the towels which are to be left in the room, and hangs them up. She then puts away all articles of clothing and carries away her pails and towels and the soiled face and bath towels, as well as the pitcher and glass for drinking water brought in the night before. Where there are a number of rooms to make up she goes from room to room, returning to make the beds and dust only when all washstands are in order and all beds stripped to air. The pitchers are filled after the room has been dusted.

There is a right way to make beds, and any amount of wrong ways. When a bed is well made the clothes are even, well tucked in at the foot, but not held in a vise-like clutch. There is plenty of cover for the shoulders, and the blanket is always with the open end at the top. One requisite for good bed making, however, is the appropriate size of the cover. It is impossible to make a single bed look well when the yard or so of extra blanket and sheet which belong on a double bed must be disposed of; quite as impossible to adapt the scant dimensions of single-bed clothes to the wide bed. Every bedstead should have its own spread and blankets, and

there should be such provision of sheets and bolster-cases that no substitutions are necessary.

The first thing to do is to reverse the mattress from the position it occupied during the preceding night. When it is cut in two pieces, as is the modern fashion, it should be turned alternate days from the side and from top to bottom. The protecting quilt or comfortable is then laid smoothly on. The under sheet, with the large hem at the top and right side up, goes on next. This is tucked under the mattress all round. Then the upper sheet, also with the large hem at the top, but the *right side under*, is put on and is tucked in at the foot. Many housekeepers make their sheets with both hems alike, to equalize the wear of the sheet.

Then come the blankets with the open side at the top, and then the light dimity under-spread. These are tucked under the mattress at the foot. With a wooden bedstead they are tucked down between the mattress and the sides only. In the case of the metal bedstead they can be allowed to hang loose if not too long for the outer cover. If the cover is short they are tucked under the mattress. The bedclothes lie flat at the head under the pillow with the sheet folded back once only.

We have said blankets advisedly. There is a modern and pernicious leaning toward substituting for the woolen blanket the cheaper comfortable. No amount of cotton wadding will replace the wool of the blanket. Cotton has, moreover, a tendency to smell of the oil when warm, which is most unpleasant. Comfortables made with wool wadding are much better, but they are more suited for the extra cover which lies at the foot of the bed at night than for use under the spread.

When sheets and blankets are adjusted, bolster and pillow are put on at the head of the bed and the decorative cover spread over. On metal bedsteads this cover may be made to come down to the floor, being cut at the lower corners for the bedposts. Usually, however, it hangs down only half a yard or so on the sides and at the bottom of the bed, while a valance of the same stuff falls from the metal rim to the floor. The treatment of the pillows differs according to taste. Shams

are still used, but they are no longer the height of fashion. Many people have a scarf of the same material as the cover, which they lay over the pillows. Some incase these in pillow-slips like the cover. Some banish them to the couch during the day, drawing the cover smoothly over the bolster. A French style, not to be recommended, is a stiff, hollow roll, covered to match the spread, which simulates a round bolster, into which the pillows are thrust. The ordinary metal bed, however, when not shaded by curtains, has too much of a prison grill effect to be pleasing if not protected by the pillows. We have seen the bed cover made to come up to the top of the bedstead, fastening on the posts with ribbon bows, and falling in full folds at the side. This requires some skill in fitting, but the effect is good.

After the bed is made the room is dusted, woodwork as well as furniture, the rug or carpet is brushed, and all scraps cleared away. This is the appropriate time to use the carpet sweeper. The bare floor may be dusted with a clean dry mop in a minute or two. This mop is also good for matting-covered floors on which lint and dust will collect noticeably in the course of a single day. A very excellent housekeeper does not permit the use of the carpet sweeper except in the sewing-room. Her carpets and rugs are gone over each day with a broom tied up in an unbleached cotton flannel bag wrung out of tepid water—such as we have already described. She also uses one of the little mops sold for dish-washing, wrung out of tepid water, for dusting baseboards and woodwork.

There is a particularly exasperating omission in dusting which too often occurs. We do not know of a more unpleasant surprise than when opening or closing a window in an otherwise well-ordered room to find the finger-tips black with the forgotten dust on the top of the lower sash. The windows are as much a part of the daily dusting as the bureau or table.

When there are many rooms and few hands to do them it should be a point of honor to reduce the amount of dusting to the lowest limit. It is not enough that the occupant of the room should do the dusting herself. In such a case her time

also is claimed for other things. It is to the young of a family that this admonition is particularly addressed. The endless photographs, favors, and odds and ends of mementos which meander over the walls of the young girl's room of the present day are both tasteless and unsightly. They are also dust catchers in the fullest sense of the word. No servant can be trusted to clean properly a room so covered, and it is an even chance if the owner finds time for a suitable dusting once a month.

Also a word on the silver articles which heap our bureaus and toilet tables. They are pretty if they are of good patterns, and when kept in proper order they add much to the looks of a room. But there may be too many of them for beauty. One toilet table which we have in mind between the various silver boxes and jars and the utensils laid out in a row across it afforded not one inch of space on which one could put down an article while dressing without disarranging the array. Its owner confided to us that she usually dressed before the glass on the washstand. The proper care of such an amount of metal work is enormous. The daily dusting and setting to rights is no small thing. We urge simplicity in all our surroundings; it is much to be admired in the arrangement of our toilet tables. A few things, and very good, and space between are better than a confused mass.

The silver articles on the bureau, especially in the cities, should not be allowed to go from one day to another without being wiped. Coal gas and the various vapors which come in through the open windows soon form a film over the surface which deepens in color every day, until the article is a uniform brown. Daily wipings will obviate this in a great measure. Frequent polishing with witchcloth will keep the silver bright and glossy. The witchcloth should be used at least twice a week in winter when the room is dusted.

CARE OF THE BEDROOM AT NIGHT

A part of the housekeeping which contributes much to the comfort of the family is the proper care of the bedrooms at

night. It is well worth the while of the occupant of the room to attend to the matter herself if it is not part of the regular work of the house. After the dressing for the evening meal is over, all clothing is put away, the washstand is tidied, and the bed arranged for the night. The spread is folded smoothly. It is the care in the folding of the spread at night which keeps it fresh and handsome. The bedclothes are then turned down. Now the advantage of the single fold of the sheet at the top shows. There is no ragged edge of various materials, nor a heavy roll, as would be the case had the turn-back included the blankets and spread. The bedclothes, if tucked in, are loosened at the side to allow them to lie lightly over the feet without disturbing the foot of the bed. The night-dress, which has hung in the closet during the day, is folded and laid on the bed. The extra comfortable is folded and laid at the foot of the bed. On it is laid the wrapper, and the bedroom slippers are placed on the floor just under it.

The window is then opened and the room left to air.

It is customary to place drinking water and a fresh glass in the bedroom at night. This may be omitted according to the preferences of the family. It is imperative in the case of guests. No guest should be obliged to ask her hostess or the maid for water, nor be forced to suffer for the lack of it.

TO CLEAN A ROOM

There are a good many ways to do each thing in life. That is the right way whose result experience has shown to be the most satisfactory and lasting. It is not always the shortest way which is the shortest in the end. The slap-dash, hit-or-miss, lick-and-a-promise way finds no favor with the practiced housekeeper. Very few shortest ways will be shown in this book. We aim rather to point out how time may be saved by doing a thing right in the first place, especially by knowing from the beginning just how to do it. It is the hesitation of experiments which wastes time in housekeeping. Therefore, when we describe the method of cleaning a room the process

will be elaborate and thorough, and the room so cleaned will remain fresh and sweet and need but the superficial dusting and brushing until the next cleaning day. Moreover, such a process does away with the horrors of housecleaning. The only extra labor to be performed at housecleaning time is the taking down and changing the curtains, removing the rugs to be shaken, and washing the paint.

The following articles are needed:

Large calico covers to spread over the beds and other large pieces of furniture.

A Turk's-head broom.

A hair broom with a long handle.

A small, slender broom for the blinds.

An ordinary broom.

A whisk broom.

Several pieces of cheesecloth wrung out of hot water and spread to dry just before beginning work. One should not dust with a wet cloth; a cloth slightly damp is an admirable duster, however.

Two or three bags of unbleached cotton flannel made to fit the broom and pulled together with drawing-strings at the top of the brush.

A carpet sweeper.

A clean, dry mop.

The general method of procedure is the same in all rooms. For convenience we will describe the cleaning of the bedroom, since that has the most varied assortment of furniture. After the windows are opened, it is the closet which receives the first attention. This needs a special cleaning two or three times a season (see directions given under "Housecleaning"). When the room is turned out it is necessary to tidy the closet shelves and wipe the floor. When the floor is covered with linoleum or finished in hardwood there should be a liberal proportion of turpentine in the water. If it happens to be carpeted, which is not a thing at all advised on account of the danger from moths incurred, the surface should be swept and then gone over with a cloth wrung out of water and turpentine.

When we come to the room proper the small rugs are run over with the carpet sweeper and put outside. All small articles of furniture are dusted and placed in the hall. All ornaments are dusted and put away in the closet. Bureau and stand covers are shaken and folded away in the drawers. The white oilcloth cover which protects the wood of washstand and bureau is wiped and also folded away. The curtain poles and rings are wiped clean, and the curtains are lightly brushed and pinned up. The bed is then stripped, the blankets and sheets being placed over chairs in the open window. The mattress is next brushed thoroughly with the whisk, care being taken to get out the dust which gathers at the tuftings. The bedstead is wiped, the bed made, its pillows laid flat, and the dust covers put over bed and bedstead. The chairs are then carried out. If there is a couch in the room this is also brushed with the whisk and covered. The washstand set is carried to the bathroom for a thorough scrubbing after the rest of the room is done. Bureau and washstand are covered and the rug is lightly run over with the carpet sweeper and folded back.

With the Turk's-head broom the ceiling, the projecting curves of the cornice, the top of the picture molding, and the tops of the doors and windows are gone over. The inside blinds are brushed and wiped.

The wall is well brushed with the long-handled hair broom, the pictures are held out from the wall and wiped on top and back, and the wall brushed behind them. Every piece of furniture is moved out and wall and floor are brushed. The rug is now opened out, well swept, and then gone over with the broom tied up in one of the cotton bags wrung out of warm water and a little ammonia. It is then folded back and the floor is brushed with the hair broom, then wiped with the bagged broom. The bags must be changed as they get soiled. A very light coat of wax is then put over the floor. A teaspoon of the prepared wax dissolved in a pint of turpentine is enough. When dry, it is polished with the weighted rubber. If the floor is carpeted or covered with filling under the

rugs, see directions for the care of carpets. If there is matting this should be washed with salt and water. The salt restores the creamy color of the matting.

The woodwork is now wiped with one of the half-dry cloths, and finger-marks are removed from the doors. The covers are taken off the furniture, which is wiped. Pictures are wiped with a dry soft cloth, and the glass polished with witchcloth or tissue paper. The mirrors also are polished with witchcloth. A special piece of witchcloth should be kept for this purpose. The furniture is replaced, the ornaments are brought back. The washstand fittings are washed in the bathroom and brought back, and the cleaning is over.

Window washing is not a part of the regular cleaning, the wiping of the mullions and casements and sashes is. So is the wiping of the glass inside. A great deal of dust will come off the apparently clear panes.

CARE OF CARPETS

Carpets may be kept neat by the daily brushing, but they require an occasional thorough sweeping. This is a part of the regular cleaning of the room. There is small good done in turning a room out if the carpet gets only the top coat of dust taken off by the carpet sweeper.

Old housekeepers scattered wet tea leaves on the floor, which gathered up the dust and kept it from rising. Salt is often recommended for the purpose. It does make a carpet look beautifully clean and fresh, but the grain is so fine that it gets into the carpet and collects the dampness from the air. A carpet swept with salt is very apt to smell musty. Damp sawdust is much better. When neither tea leaves nor sawdust is available, newspapers torn into small bits and soaked in water do very well. Some housekeepers pour a little carbolic acid into the water to dispose of possible germs in paper and carpet. The water should be squeezed out of the paper and the damp pulp separated and scattered over the floor. This is drawn about with the broom until it is coated with dust. If the carpet has been neglected and is very dirty, a sec-

ond application is advisable. When the dusty pulp is gathered up in the dust pan the carpet is thoroughly swept from the corners to the centre, and the dust removed. It is then swept a third time. There should be no fear of wearing out the carpet in sweeping. Inground dirt wears a carpet far more than thorough sweeping. If the carpet looks very dingy it should be mopped or wiped with a perfectly clean mop or handcloth wrung out of warm water into which has been put ammonia (a cup to a scrubbing pail) and three or four teaspoons of camphor. Or soap and water may be used with a little turpentine in it. Both mixtures are discouragers for moths. The water should be changed often. All carpets and fillings look the better for an occasional washing. Wilton and other velvet carpets need it to remove the lint which gathers on top and will not yield even to the carpet sweeper.

The following treatment belongs more to the house-cleaning than to the regular turning out of a room. It is warranted to make a carpet look as good as new:

Two quarts of sawdust, two quarts of white clay, half a cup of ammonia, and three quarts of water are mixed together in a pail. The mixture should be stirred thoroughly with an old broom which is worked nearly to a stump.

One should begin early in the morning of a bright day. The furniture is moved out and the carpet well swept. The preparation is rubbed into the carpet so that there is a paste covering the entire surface. It must remain five or six hours and dry. It is then brushed off, the room being swept several times until the paste is all out of the fibre. The materials cost about twenty cents.

Spots may be removed from carpets with a paste of fuller's earth, which remains for a day or two and is then brushed off.

Grease spots may be taken off with fuller's earth, brown paper and a hot iron. If fuller's earth is not at hand, flour will do as well. When it is possible the carpet is lifted and a sheet of brown paper folded in two with a layer of the earth or flour inside is put under. A similar pad is put on top and

ironed with a very hot iron until the paper and flour are soaked with grease. It may take several applications. The spot is then well washed with benzine and soap and water.

Soot and blacking on a carpet should be covered with oat-meal, salt, or corn-meal. These rubbed in and then brushed off will take the blackness up with them.

Alcohol will remove spots caused by jelly, sticky flypaper, molasses, varnish, or honey. A little salt should be added to alcohol if the stains are of long standing.

Ink yields to milk and salt when fresh. Salt enough to prevent the ink from sinking into the carpet is put on. Milk is then poured over and wiped up. If it does not come up with the first application more salt and more milk should be used until the stain is removed. The spot should be well washed with hot ammonia and water to keep the grease in the milk from spreading.

Old ink stains may be rubbed with ammonia put on with an old toothbrush and scrubbed well. The liquid should be taken up with blotting paper. Oxalic acid applied immediately afterward will remove the ink. The spot should be washed with water to keep the acid from eating the carpet. Ingrain carpets may be darned with ravelings of the same to cover ink spots.

The rug after being well beaten should be tacked on a bare floor. It is then scrubbed with ammonia suds and rinsed until all the soap is out of it. It must dry on the floor. If left to dry in this way, without removing the tacks, it will not shrink, roll, or pull.

CARPET MENDING

Carpets should be mended before they are shaken. If spread on the grass and swept on both sides they are not too dusty for mending. The odd half-yard left over when the carpet was bought should be raveled out. The darner can then restore the figure of the pattern as much as possible with the original colors. When this is not feasible, the two-colored twine used at the grocery stores for tying up parcels is the next best. Ingrain carpets may be darned with single

zephyr wool. Expensive carpets should be made over once in a while and the breadths shifted in position to equalize the wear. An old carpet is generally more attractive than a new one, for the colors are better harmonized by wear and the inevitable change of color from time and light. When a room is furnished with a carpet which suits the furniture and decorations it is well to make it last as long as possible. A new one would not only make everything look shabby from its freshness, but be all out of key in color. In carpets, as in everything else, colors have their day, and it is as difficult to match an old carpet as a last year's hat.

The Eastern rugs are of much better wearing material than our Western manufactures, but many of them are already old when they come to this country, and show wear very soon. The large carpet houses have Oriental experts to mend them, and the expense is really very little compared with the value of the rugs. When it is not advisable to send them out to be mended, the work can be done at home very well if enough time and patience be given to its accomplishment.

The first requisite is a quantity of split zephyr wool or other fine yarn as near the different shades of the rug as possible. If the shades of the wool are darker it does not matter so much. They must be in the same range of color, however.

The darning is done by hooking the wool through the linen foundations stitch by stitch, and knotting it on the right side in the manner of the old-fashioned crocheted rag rugs. One should follow the pattern carefully. The wool is sheared down to the level of the rug when the darn is finished. When the foundation is worn through it must be replaced by basket-work darning, which will serve for a new foundation through which one may crochet the wool.

Old carpets need not be the despair of the housekeeper. All carpets will dye, and many different patterns of one material can thus be united to form the cover of one room. There is a difference in the wearing quality of the colors which may be used in dyeing. All carpets take a good dark red,

however, which lasts admirably. Velvet carpets especially dye well. They must be thoroughly beaten before they are dyed, or they will always be dusty and hard to clean. Old carpets make very pretty rugs when cut in strips and woven. There are many factories scattered through the country engaged in this business. The cost is about what one would pay for a cheap ingrain, but the rugs returned are very durable and would outwear three ingrains. They have the further advantage of being without pattern and mixed in color. They are not, of course, as decorative as fine Eastern rugs, but have a very good effect for halls and bathrooms or are suitable for bedside strips in the summer home.

CARE OF THE LINEN CLOSET

We have said that we consider the linen closet most valuable to the homemaker.

We must confess that to us it is the most fascinating of the different departments of the house, and we fancy that we are not alone in feeling always divided between a desire for an accumulation of these stores of bed and table coverings and a wish for sufficient room on the shelves to show them properly. There are very few houses where both desires can be gratified. One of the prettiest sights we remember was a linen closet whose wide shelves had been stained a deep rich red, varnished, and polished. On them lay the piles of linen, each dozen by itself, separated from its neighbor, and each reflected in the smooth glass-like surface. Such space we may not have, but the order we may. When the wash comes up the articles should be sorted into dozens and replaced on the shelf at the bottom of the pile to which they belong. To equalize the wear of linen in this way makes its life much longer. Inanimate things need a rest as much as animate. They get tired if in constant use, and wear out sooner.

The homemaker would do well to keep a list in the linen closet of its contents, going over it spring and fall, crossing out the articles worn out or discarded, and entering the new

purchases. Such a list is a necessity when the linen closet in question is in a country house, closed half the year. Few memories are so accurate that they can carry the details of such matters from season to season. A copy of the list carried to the city is also an aid to the purchase of what is required for the succeeding summer.

We do not uphold the accumulation of articles past their use, but in the linen closet there should be a place for old sheets, pillow-cases, and towels. These have, in fact, finished but one period of their career. There is still a wide field of usefulness open to them.

We have spoken elsewhere of the desirability of mending an article before it is washed. This applies with special force to all household linen.

CARE OF THE BATHROOM

A very neat housekeeper is known by the care bestowed on her bathroom. Part of the regular work of the day is wiping out tub and basin and washing the washstand set. A tiled floor must be washed every week and the metal fixtures kept bright. The bowl of the closet should be scrubbed every day with the brush kept for the purpose, and a generous portion of disinfectant poured down.

The ventilation of the bathroom must be left in great measure to those who use it. It should be just as much a point of etiquette for the individual to open the window before leaving the bathroom as is the emptying of the tub after use.

Where there are many to follow each other in the use of the tub in the morning, there is a little more than the mere emptying of the tub required of common politeness. Each individual should wipe it out carefully with a little soap or a touch of sapolio on the cloth which should be kept at hand for the purpose. We should never allow our successors to clear up after us. It is a most unpleasant sensation to survey the tub, with the high-water mark inevitable, where the water is at all hard, when we personally are in a hurry. One woman

long tried by the carelessness of her fellows was driven to define "a Christian" as "one who wiped out a bathtub after using."

A FEW TIMELY REMARKS

Creaking doors will cease to be noisy if the hinges are rubbed with soap or graphite.

Hard soap rubbed on the running edge of refractory bureau drawers will make them run easily. It is also a good thing to use on sticky windows.

Doors which have swelled from moisture in the air should not be planed off, but have the hinges driven back a little in the casing. The trouble also may sometimes not be the swelling of the door, but because it is not properly hung, the space between the hinges on the casing being narrower than that between the hinges on the door by a small but perceptible distance. When this occurs the carpenter should be called in to raise the upper hinge.

Castors should be wooden. For hardwood floors these should be covered with leather.

Paint buckets containing remnants of paint in them should be put away with an inch or so of oil over the paint.

All brushes should be cleaned when put away—paint, whitewash, or paste.

XIX

IN THE DINING-ROOM

Care of the Dining-room—The Table—To Set the Table—The Fern Dish—Waiting on the Table—To Clear the Table—To Wash Dishes—The Duties of a Waitress

CARE OF THE DINING-ROOM

THE dining-room should be kept in spotless order. It should be well aired before breakfast, and for a little while after each meal. There should be a daily dusting, and the floor must be brushed around the table after it is cleared, if the inevitable crumbs are to be kept from working into the carpet or rug.

It should be one of the prettiest rooms in the house, if not the very prettiest. In no other room do we sit for an hour at a time with the eyes free to wander around and the mind open to observation.

It should be harmonious and it should be simple. There should be no unnecessary furniture, and the wall decorations should be well chosen. This is the room of all others which should have the surface of the wall plain. Nothing is more wearisome than to follow with the eye the pattern of the wall paper during the pauses of the meal, marveling at the tasteless iteration of the same.

The dining-room should also be large and well lighted. The breakfast-room habit, which prevailed some years ago, has happily passed away. People no longer consider it right to take their meals in small, inconvenient rooms while the large, handsome, well-appointed dining-room stands empty.

With the breakfast-room also has disappeared the fashion of slipshod meals except when guests were expected. If there is anything more calculated to lower a person's self-respect than the habitual omission for one's self and one's family of the care and nicety which are considered due to the

guest, we are ignorant of it. It was not necessarily slatternliness which caused that state of things. It was a misconception, a confusing of cause and effect. There is still a self-sacrificing New England spirit abroad, and it sometimes mixes up things comically. Is there not an underlying truth in the saying that a New England woman was contented only when she was unhappy? Happiness was wrong! So in a curious sort of way was comfort. It partook of the carnal! With this mental attitude toward comfort was united the inherited frugality of the section, and firmly imbedded in the New England mind remains the conviction, not always analyzed, that comfort is a synonym for both extravagance and wickedness. That woman who complained that her sister-in-law was a spend-thrift because every evening, even when alone, she had coffee brought into the parlor after dinner, was of New England stock. The habit was comfortable, it must be wrong and expensive! That it was really a matter of economy in the service of the small house did not weigh in her mind. The one maid of the household had access to the dining-room so much the earlier. The table was cleared, the cloth replaced, and the folding-doors opened by the time the coffee was drunk and the cups replaced on the tray.

That there is much of comfort which is not extravagance in money can be proved by every housekeeper if she keeps her books. That it is a wise investment in temper, disposition, and training of the family does not appear in figures, but in the final results. That there was a wastefulness in the seeming economy of the breakfast-room habit is also true. The handsome dining-room was wasted when the family huddled in the little room. So were the nice appointments which were brought out only when the guest appeared. Entirely out of the question was the pleasure in hospitality which consists in offering what one has.

THE TABLE

The fashion of setting the table is a matter of individual taste. One thing is important: all articles intended to be

decorative should decorate. The embroidered centrepiece should be perfectly clean and well laundered. The fern dish should be a dish of ferns, not a tin filled with scraggy, sickly fronds! Prettily arranged flowers are a delight; but a yesterday's vase with the water stained by the plant-juices is no object of beauty.

The linen should be clean and unused. The washing of table linen is a considerable matter in the economy of a family. Yet if there must be a sparing in the laundry, it is better to make it in the matter of overtucked and ruffled starched white skirts than in the table linen. No table can look well and appetizing without clean linen. Many people reserve one handsome cloth for the dining table during the week, often serving the luncheon on the bare table or on a colored cloth. Sometimes the bare table is used for breakfast as well, especially if there are children whose small hands are still unsteady in the matter of cream and oatmeal. With very elaborate service it is customary to give fresh napkins with each meal. As a rule, however, the napkin is fresh every day at dinner. It is put in the ring of the temporary owner after dinner, and serves for the breakfast and luncheon of the next day.

The damask cloth needs a flannel or felt cloth under it. Without such a cloth the best damask looks thin and cheap. It is also necessary to preserve the varnish of the table from the heat of the platters and dishes. This under-cloth should be washed and bleached occasionally. It is too faithful a chronicler of the mishaps of the careless not to demand the grace of a periodic expunging of past records.

Asbestos pads are to be preferred to the felt when the meat is carved on the table. No ordinary precaution will save the finish of the wood where the heat is applied so regularly and for such a length of time. The asbestos is covered with double-faced Canton flannel and is soft and rich in effect. These pads are sold of all shapes and sizes in the housekeeping stores. They are so prepared that they will fold into convenient lines to lay away in a drawer when not in use. When

the bare table is preferred asbestos mats are slipped into doily-like covers to place under the hot dishes.

The surface of the table itself must often be polished, especially if it is used without a cloth. Any good furniture polish may be used, or it may be rubbed down weekly with a light coat of the wax prepared for the floor. This gives a kind of opaque lustre which is considered much superior by the artistic to ordinary varnish.

TO SET THE TABLE

To set a table properly seems to the novice a very easy thing. But let her try to instruct an untrained maid, and she will speedily find herself at sea. Every housekeeper should know just how, and be able to explain just how as well, which is a trifle more difficult. When it is necessary to break in a new waitress, it is well to write out the routine and pin it up in the butler's pantry. It is not a bad idea for the young housekeeper who is her own maid to do so for herself. It will save her a good many steps in the early days of her work.

The dining-room is supposed to be in perfect order between meals, with the table covered and the fern dish or vase in the centre. The first duty of the maid is to take off the fern dish and remove the table-cover, folding the latter carefully and putting it in the drawer reserved for its use during meals. It can not be left on a chair, waiting to be replaced after the meal is over, without spoiling the whole effect of the room. The tablecloth is spread over and smoothed. It should hang evenly at the ends and be straight with the table, and the table be straight with the wall. The annoyed pushing to right or left of the crooked table by the head of the family is a serious trial to the nerves of the others present. The crooked tablecloth is a thing not to be amended easily, and remains an eyesore during the meal.

The embroidered centrepiece is then put on and the vase, or fern dish, or dish of fruit, as the case may be. These, as we have said, must be fresh and dainty. It is well to have a variety of combinations which can be used, and to vary the

decorations of the three meals in one day. Artificial flowers or ferns are in distinctly bad taste. They do not afford the variety which the growing plant or the frequently changed bunch of flowers will give; moreover, they soon become dusty and unsightly—and at best are *artificial*, not *natural*.

The next thing to do is to put the salt-cellars, with their spoons, and the pepper-boxes on the corners of the table inside the plate line, between crossed tablespoons. These spoons are sometimes used for serving the vegetables, but more often they remain on the table during the meal, the proper spoon being passed with the dish. When the table is long, more than the four sets of salt-cellars and pepper-boxes are needed. These may be placed by the centrepiece. Individual salts and peppers are not recommended, on account of the extra care required. Moreover, their original cause of existence has departed. No one nowadays ever puts his knife in the salt-cellar. They were a clumsy expedient at best, for unless one could be sure of using the same salt-cellar each day with the salt untouched, what better was one off? Glass salt-shakers are also much care. The silver tops must be cleansed daily and the salt removed and dried if they are to be effective.

This is the routine so far for each meal. The setting differs a little for the three meals of the day, according to the requirements. As dinner is the most ceremonious of all and needs the most care, we will take up the various items of its needs. The points of difference between this and the others lie chiefly in the omissions which may be indulged in for luncheon and breakfast.

It is customary to put at each place a dinner plate covered with a small doily, the soup plate being set on it when the soup is served. This plate and its doily remain during the fish and entrée course, when these make part of the dinner. Good form requires that the space before the individual should always be occupied by a plate of some kind. The object of the doily is to prevent the plates from slipping and clattering on each other.

A dinner of three courses requires a soup spoon, a knife

and fork in front of each person when the family sit down. The spoon and fork used for the dessert are not put on until after the table is brushed. When there is fish, a salad, or an entrée, another knife and fork are needed, smaller in size than the dinner knife and fork. As a rule both are of silver. This is invariably the custom when fish is served. The knives lie in a row at the side of the plate, on the right, in the order of use, and the forks on the left. The place of the soup spoon has always been in front of the plate, but the long and dragging sleeves of the present style of dress have brought it round to the right outside the knives. It is a canon of etiquette that the spoon should not be touched until the soup is served, and the lace and chiffon are apt to suffer so much in the process of reaching for it that perhaps the spoon has migrated to stay.

The napkin lies on the plate called the service plate, over the doily.

Butter is not usually served at dinner. When it is, the bread-and-butter plate is at the right of the service plate with a small ball of butter on it and a slice of bread.

The glass is also at the right just beyond the points of the knives.

When the table is so far set the waitress then finds out what platters and vegetable dishes are needed, and puts them to warm as well as the plates for the soup, meat, and entrée, or fish, if either is part of the dinner. She then places the plates for salad and dessert on the serving table with the proper spoons and forks for serving. She then prepares the finger-bowls. These stand on small plates with a small ornamental doily under them, and the fork and spoon for the dessert on the side. When there is fruit the small, sharp-pointed fruit knife is added, and a fruit napkin, folded small, laid on one side. The finger-bowl and doily are set on one side by each individual, the dessert plate underneath being used as a serving plate for the saucer of pudding or for pie or fruit. The use of an under plate when puddings and berries are the dessert greatly aids in the preservation of the

purity of the tablecloth. The finger-bowl should be filled about a third full with warm water.

The waitress then cuts the bread, in large pieces if no butter is served, in slices if it is, and places one portion on the napkin or plate as the case may be. She sets the chairs at the places and fills the glasses just before announcing dinner. This is the bare outline of the method of setting the table for a family dinner. It is within the possibilities for a household with only a maid of all work, or even when there exists an independence of hired help. With everything ready to hand there should be no difficulty in changing the plates. The serving in courses aids materially in simplifying the clearing of the table.

The table can not be considered set unless the plates, spoons, etc., for all emergencies are prepared and at hand on the sideboard or serving table. Everything needed must be ready before the meal is announced.

THE FERN DISH

The fern dish is an institution which is here to stay. It may be a brand-new affair, a silver ring which covers the tin receptacle, or an old silver caster, or a pretty pudding dish which has been fitted with a tin. An old blue tureen with its tin interior dish makes a charming decoration for the table in a blue and white dining-room. It has the further advantage that it will contain more earth and permit of drainage which the ordinary fern dish will not. These have only a substratum of moss with the roots of the ferns and palms and their adherent earth crowded close together above it, and as a rule must be watertight. This makes the care of the fern dish something of a puzzle, as one must steer clear between the dangers of too little and too much moisture. Ferns need plenty of water, but this must not become stagnant. The dish should be filled full each day and then held upside down, the hands supporting the earth until the superfluous water has run out. Between meals it should stand in the sun, and it should get as much fresh air as possible. In the dry atmos-

phere of a steam-heated house it is well to cover it with a wet towel each night. So treated we have known one to last three months in a city house. The earth may become exhausted in time. In that case a drop of ammonia in a cup of water will go far toward restoring the necessary nitrogen.

WAITING ON THE TABLE

When the waitress puts the plates to warm she is careful to heat one more for each course, except that of soup, than there are people present at the table. The soup plates are put in front of the head of the table, taken by the waitress as they are filled, and placed on the service plate before each member of the family. She carries them on a small round tray covered by a round napkin a little smaller than the plate. With all other courses a plate is put before each individual. The waitress then stands by the server with the extra plate of the set in use for that course on her tray. This plate she puts before the server of the course, as she removes the one filled to pass. She sets the filled plate down before the individual she is serving, removing the empty one which she brings back to substitute for the one just filled. At the end of the course she removes the plate used and replaces it with a fresh, clean one belonging to the succeeding course.

In placing the meat ready for the carver, roasts of beef, rib, and sirloin should have the back-bone at the right hand of the platter. A filet of beef should lie with the thickest end at the right hand side of the platter, and be carved in thin slices horizontally like a round of beef. A leg of lamb, mutton, or veal is placed with the thickest part on the further side of the platter. A ham, roast or boiled, should have the knuckle end turned to the carver's left side, and be cut in thin slices sloping toward the right. A loin of veal should be cut across through the thick part in very thin slices, and a small piece of the kidney and its fat given to those who like it. Small birds are placed crosswise on the platter, heads on the further side, and large fowls with heads to the left.

In carving a tongue a cut is made through the thickest part, leaving just sufficient to keep the two parts together.

The vegetables are passed to each in turn, beginning with the hostess or the head of the family, each individual helping himself. The dish is then set on the table or on the side-board as is preferred. If put on the table the dishes must be so arranged as to balance each other.

Salad is passed in a bowl with a large flat spoon and fork for serving. The spoons and forks are of silver, horn, or wood.

In clearing the table for dessert the waitress first removes the platters and vegetable dishes, then the plates, then the salt-cellars and pepper-boxes, which should have their own particular tray that just holds them. She then brushes the table, sets on the finger-bowls, and brings in the dessert. She fills the glasses after each course is passed, and always after the dessert is served.

When the coffee is drunk in the dining-room it is usual to have the cups filled in the butler's pantry and put before each one, the small sugar-bowl and cream-pitcher being then passed. Many people prefer to pour the coffee. The tray is ready set with the small cups, not piled up, but each in its own saucer, with the tiny spoon by its side. The sugar-bowl and cream-pitcher and the tall, slender coffee-pot complete the tray. Cream is not as a rule taken with dinner coffee, and may be omitted when there is no one present to whom it is a necessity. There are many, though, who find the real coffee taste unpleasant, and to whom the omission of the cream is an appreciable loss. It must be cream, however, not milk, which would only spoil the coffee.

When the coffee is brought into the living-room, which, as we have said, is a real aid to the speediness of the table clearing, it is well to have more than the exact measure of cups in the coffee-pot. Sociability often leads to a second cup. We lay special emphasis on *living-room*. Coffee should always be served where cigar smoke is tolerated. Half the pleasure of the beverage is missed to a smoker if he can not enjoy his cigar with it.

TO CLEAR THE TABLE

There is a certain knack in clearing the table, and a routine which should be followed. The dining-room door is closed. Then the chairs are set back against the wall. The dinner table is already cleared except for the dessert dishes and the glasses, and much of the preliminary work can be done while the different courses are on the table. The first care is the food. This should be transferred to kitchen dishes and put to keep warm until the time of the kitchen meal. The platters and dishes are then scraped and set in the butler's pantry. The maid then gathers the forks and spoons together, placing them in a pitcher or jar half full of soap-suds. The steel knives are put into a similar receptacle. All bits of food left on the plates are put into the earthenware dish which stands ready for them, and the plates carefully scraped and put in piles. If it is the breakfast or luncheon dishes which are being prepared for washing, each coffee or tea cup is rinsed with hot water and set on one side. Glasses and pitchers which have had milk in them are filled with cold water and left to stand.

The cloth is then removed from the table, the serving table brushed and set in order, the floor brushed, the cover put on the table, and the fern dish replaced. The window is then raised, a little in winter, wide in summer, and the dining-room door may be opened. The work in the dining-room is done and the dishes are ready to wash.

As regards the washing, the most important part of the labor is already performed in removing the grease from the silver and the knives, the sugar from the cups, and in careful scraping of the plates. It is now possible to wash the dishes in water which does not instantly become foul, and to keep dishcloth, pan, and sink clean, not to speak of the pipe to the sink and its trap.

In removing the dishes of a course they should never be piled up on each other, but taken off one by one and set on the serving table, the one belonging to the subsequent course being set down in its stead. Piling dishes one on another

is a most unpleasant sight. It also complicates the washing very much, as there is not only the top of the plate to scrape, but the bottom.

TO WASH DISHES

The preliminary work in scraping and rinsing done, the dishwasher then looks at her pan and sink. If they have been properly cleansed after the last time of using, she may begin. If not, a thorough washing with hot water and ammonia is necessary. It is not easy to have clear glass and smooth china with a greasy dishpan or sink. The mop must be clean, too, and the yard or so of cheesecloth also which does duty as a dish rag. This cheesecloth is far superior to any other kind of dish rag. It is soft, washes clean easily, and dries at once. There must be plenty of hot water and towels, and these towels not too old. Old towels soon get wet through and the lint which comes from them is one of the dangers from which we must guard our pipes.

By the sink or dishpan there should be a rinsing-pan holding hot water. The glasses are washed first with a few drops of ammonia in the water, and dried at once. It might be well here to add that glass cloths should never be boiled in the ordinary way. Soak in tepid water before they are badly soiled, and wash without soap. They may then be boiled in water softened with a little soda. They should be dried out of doors. A much better polish is obtained with the glasses if cloths are cleansed in this way.

After the glass comes the silver. A good suds is made with the bit of soap in the soap-holder, and the silver is put in. When the forks and spoons are blackened by egg a couple of rubs with whiting and ammonia will remove the stain. It is better done before washing. There should be a little saucer ready mixed at hand. The silver is scrubbed with a brush rinsed and dried. The silver, which is rinsed before it goes into the pan and never lies in greasy water, being wiped hot and rubbed well with a towel, needs very little special cleaning. It is when the grease gets into the pattern that silver looks black and unappetizing.

Next are washed the plates and platters, one set soaking in the pan while the others are being wiped. The water is changed as is necessary.

Dishes should not be piled immediately after washing, but allowed to cool. Many people do not allow their plates to be piled directly one on another, but place felt doilies or bits of folded tissue paper between. With fine china this saves a great deal of scratching and marring.

The water can not be too hot for silver, but it may easily be too hot for glass or china. Cut glass especially should never be washed in too hot water, nor have hot water put in it. Even the presence of the always useful silver spoon will not save it. It should be washed with a brush. Special care should be taken that the water, brush, and cloth are clean. A very small scratch means a future break. It is most brilliant when dried in boxwood sawdust. This should be spread to dry after using, to be ready for the next time.

The knives come last. They are wiped dry and rapidly polished on the emery board or with a large cork dipped in powdered bathbrick. They are then washed again and wiped dry. Stains may be removed by using a piece of raw potato to apply the brick dust instead of the cork. Bone, horn, ivory, or celluloid handles should never lie in the water. It not only melts the cement, but causes the metal to swell, with the chance of cracking the material.

If the handles have become loose they may be recemented to the blade by means of a paste of brick dust and melted rosin, applied hot.

Ebony handles should be rubbed with a little sweet oil and wiped dry. Ivory handles may be wiped with alcohol to clean them. When yellow the color may be restored by the use of alum. The handles should be allowed to remain an hour or so in alum water which has been boiled and cooled. The knives should stand upright in the water, which should not rise to the metal. When taken out they should be well scrubbed with a small brush and wrapped in a linen towel wrung out of cold water and permitted to dry in the towel.

There should be a little cup of shot on the shelf, by means of which decanters, carafes, and small-necked vases can be cleaned. When shot is not obtainable, a raw potato cut in small cubes will answer the purpose.

The care of the salt-cellar is most important. Salt spoons should never be left in the salt-cellar, but be washed regularly after each meal. It is almost impossible to get a neglected salt spoon to look well again. The salt-cellar should be emptied each day and the salt dried in the oven when the weather is damp. It is customary to pack the salt in the salt-cellar and smooth the surface. Many people, however, prefer the effect of a spoon or two of light dry salt put in just before each meal and left as it falls. It certainly looks fresh and appetizing.

The new house will have glass doors for the dish shelves in the butler's pantry. When we must put up with old-fashioned fittings, a strip of white Swiss muslin tacked on the upper shelf and hanging down plain to the level of the lowest will be found a great help in keeping the dishes free from dust and flies.

The silver and knives should be sorted after each meal and laid in rows in their respective drawers. Most sideboards have a silver-drawer lined with green baize or velvet. When the drawer is not lined there should be a pad made of Canton flannel which has been washed. The new Canton flannel usually has so much of the bleaching chemical in it that it soon blackens the silver. The making of the pad is very easy. Stiff brown paper is fitted to the drawer and the Canton flannel is basted over this with a layer of cotton batting between.

There is much choice in the matter of soap for the butler's pantry. The cheaper kinds are apt to leave an unpleasant odor on the china. Some people use Ivory soap entirely on that account. Soap should never be left in the pan to soften. For many uses ammonia is much better than soap, notably for all glass and polished surfaces.

Noise and bustle is offensive in any part of the house. It

is particularly so in the dining-room and butler's pantry. The chink of silver and clatter of dishes gets on the nerves of the most placid housekeeper. The capable waitress avoids all unnecessary noise. She uses a brush, carefully washed after each meal, to remove the scraps of food from the plates. She lays down each silver article, never drops it, and takes pains to sort the pieces noiselessly. She ties a cloth around the faucet so that the drip will not be heard in the house, and all splashing of the water avoided.

After the dishes are done and put away, the draining board is wiped and the pan well washed, as well as the mops and the dishcloth.

It is not necessary for the dishwasher to put her hands in the water if she is careful about the use of the mop and does not fill the pan too full for the silver to be easily taken out. There is a new invention especially designed for the preservation of the hands from the hot water. It is a dish-washer—a brush with a handle secured to the end of a rubber tube. The other end of the tube is intended to fasten on the faucet, and through it the water is turned on, running down through the handle of the brush and out among the bristles. The brush is soaped, and the dish scrubbed while the water runs. This is evidently designed for the apartment house with superheated water from the central boiler, and seems hardly fitted for the cleansing of many dishes at a time. It would be a boon to many a woman who has but her own cup and plate to wash and whose hands must be always presentable.

THE DUTIES OF A WAITRESS

Outside the mere care of the dining-room and the butler's pantry, there are some duties in regard to the preparation of food which fall to the share of the waitress.

The cook must have the food ready for the waitress, and it is her responsibility to keep it hot. She garnishes the dishes and carves the meat if it is cut in the kitchen.

The waitress has charge of the salads and the fruit. She

washes the lettuce as early in the day as possible and puts it in a clean towel on ice. Lettuce and celery should never touch the ice. The taste of the vegetable is quite perceptible if that piece of ice finds its way into the ice pitcher.

Salad dressing is added just before serving. French dressing is best made in a quantity and kept in a bottle in the refrigerator. It must be well shaken before pouring out. Mayonnaise will keep for several days on the ice. It should be beaten up afresh before it is put on the salad, however, or it will be thick and clogging. Some beat in the stiff white of an egg when mayonnaise has been kept more than one day, to make it seem light and fresh and to add to the taste. Very few cook-books lay sufficient stress on the quantity of salt required for mayonnaise. The ordinary mixture is too flat. It must be remembered that the dressing carries not only the salt which it needs for its own flavor, but often for the article it is to dress. A heaping teaspoon is not too much for the quantity made by the use of one yolk of an egg and half a pint of oil. If the salt and the dry mustard are mixed with ice water before they are added to the egg the salad will not break in mixing, and there will never be the crude taste so often noticed.

The fruit should also be prepared as early as possible and put near the ice to chill thoroughly before it is served. Tepid berries and sliced fruit are not half so refreshing as those properly prepared. Sliced peaches may be chilled without danger of turning brown if they are put into a Mason fruit jar immediately after they are cut up. They must fill the can and the cover be well screwed down. All canned fruit also is better chilled.

The care of the table butter is also the charge of the waitress. This should be made into balls early in the morning in sufficient quantity for the day. This is a real economy in the use of the butter. Less is eaten and the quantity left on the bread-and-butter plate from overgenerous helping is also lessened. With bread-and-butter plates and the individual butter knives of to-day there is no reason why the bits left

should not be used for cooking. In the old days, though economy made it necessary, there was always an inward repugnance to putting back into the common dish any remnants which might have remained on the plates. They did certainly look mussy and unappetizing, besides being open to suspicion of contact with the eater's fork.

XX

IN THE KITCHEN

Care of the Kitchen—The Hard-coal Fire—The Safe and Refrigerator—The Care of the Storeroom

CARE OF THE KITCHEN

THERE must be even more care exercised in the kitchen than in the butler's pantry to avoid the disappearance of bits of food down the sink pipe, for the opportunities for carelessness are more frequent. The sink brush and the little rubber-shod shovel must always be in evidence, and be conscientiously used. There is no reason, moreover, why dishes should not be as well scraped in the kitchen as in the dining-room, and the scrapings of pots should never be thrown into the sink, but at once into the garbage pail. The kitchen sink should never be allowed to get greasy. A greasy sink attracts the water bug. One kept clean and well scalded with hot soda and water is no invitation to these unpleasant pests.

Cupboards and closets also need frequent overhauling, and the renewal of the papers on the shelves, if paper is still used. It is poor economy to keep the same paper long on a shelf. There are too many germs ever afloat in the air. For that reason the stamped oilcloth sold for shelves is a mistake. It can certainly be washed on the surface, but the Canton flannel under side can not. After all, a well-painted shelf, with neither paper nor oilcloth, is in these days of house sanitation desirable, because easiest kept free from germs or more innocent dust.

Tinware should never be washed with soap, but with ammonia or soda. The soap spreads over the tin in a glaze and does not come off. To brighten tinware wood ashes and kerosene are useful. A crumpled newspaper is also excellent. Ironware may be scoured with finely sifted coal ashes. Gal-

vanized iron is brightened by rubbing with kerosene. The copper boiler needs oxalic acid as well as a good deal of rubbing to keep it a thing of beauty.

The outside of iron pots and frying-pans can be kept quite free from smut if rubbed after each time they are used with a newspaper. Teapots or coffeepots which have become discolored on the inside should be boiled in a strong solution of borax for fifteen or twenty minutes. Borax is excellent for cleansing discolored tinware of any kind.

Kerosene oil and whiting mixed will remove iron rust. This combination will also clean tins perfectly, and will remove stains from porcelain baking dishes.

The modern kitchen table is covered with white enameled cloth or zinc. When the table is bare there must be great care taken not to blacken it with pots or stain it with fruit. A pot board is necessary even with the enameled cover. The board should have a hole through it, and be hung up when not in use. It may be well to know that a stained wooden table may be thoroughly cleansed with a ripe tomato when the stains are fresh. If they are old there is no remedy but the plane. It is not a bad idea to have a table planed once in a while. The surface becomes rough and ragged and full of dishwater and other liquids unless the cook is remarkably neat. A few minutes' work with a plane gives a smooth, fresh surface and an air of cleanness and newness. Before it is planed the nails must be driven down below the level of the surface.

The careful cook will always fill the used pot or saucepan with hot water if it must stand before washing. This is very necessary when eggs have been cooked in them. Any dish in which eggs have been broken should be washed at once or filled with hot water. Dried egg seems somehow to become a part of the utensil.

The food in agate, iron, or enameled saucepans is apt to burn from the thinness of the ware. There should always be an asbestos mat under such pots and an old plate inside the pot if the article cooked is especially fibrous or heavy. This plate should never be omitted when the food is boiled in a cloth.

When the food does burn on to the saucepan the burned part must be taken off or a larger burned surface will be inevitable the next time the saucepan is used. A thorough rubbing with the wire dishcloth or scraping with a clam shell is necessary, and a good polishing with sapolio afterward. The place must be smooth to the finger.

A piece of bread or a bit of charcoal in the water in which cabbage or cauliflower or onions are cooked will prevent the smell from going through the house while the pot is on the fire. No precaution will avail, however, if the water which is poured off is not followed instantly by a copious flushing of the sink with cold water. It is the duty of the cook to open the window a little at the top when food is being boiled, in any case. Also after cakes have been baked on the griddle.

THE HARD-COAL FIRE

Gas has not yet entirely superseded the coal fire. Indeed, many housekeepers with large families use both. The lighting of the latter is, however, a much more elaborate performance than the touch of the taper to the gas-jet. There are numerous young housekeepers who more than any other part of cooking dread making the fire. It is really not so difficult, *if one knows how*.

The first thing to do is to close the draughts. Then we remove the top of the range, and brush all cinders and ashes that have collected at the sides into the grate, and replace the covers. The grate is then dumped, and, after a couple of minutes' waiting to allow the ashes to settle, the covers again taken off. On a newspaper unfolded and lightly crumpled in the bottom of the grate are piled loosely the small blocks of wood sold for kindling, or the sticks from the woodshed. There must be air space left between the bits of wood. Economy in kindling-wood is unwise; the grate should be filled to the top of the firebrick with the heaped wood. The draughts are then opened, the paper lighted, and the covers replaced on the stove.

When the wood is well ignited a shovel or two of coal,

enough to cover the wood, is put on. After this kindles more is added. One should never turn on half a scuttle at a time. When the fire is fairly burning, the draughts must be closed.

The fire must be on the cook's mind during the day. It must not be allowed to become so low that it must be coaxed with wood, nor permitted to burn beyond the point where the red coals grow white with heat. When that happens fresh coal should be put on, enough to encourage the fire. The draughts should be closed when the fire is not in immediate use. This is the time when the cook should have her wits about her, and supply fresh coal at the right time, opening the draughts enough to make the fresh coal kindle. Kerosene must not be poured on to aid in kindling. A little poured over the coal on the shovel will not be dangerous, but its use is not advised. The homemaker should know that a handful of sugar thrown on the coals is far better and not dangerous at all.

Where the coal fire is used to the exclusion of gas or oil, the fire should not be allowed to go out at night. At bedtime the ashes should be raked out, fresh coal put on, and the draughts opened for ten or fifteen minutes, or until the coal is fairly kindled. Then the draughts should all be closed, the upper stove door, or if there is no upper door its equivalent for draught, opened, and the fire left to itself. The first thing in the morning the stove door must be closed, the draughts opened, and when the fire is red a little fresh coal put on. Before the fire gets good headway the top of the stove should be lightly brushed over with black lead or enameline. This is only a slight toilet for the day, not the thorough blacking which a stove needs at least once in a week. When the fire is well started the ashes may be shaken down and a small quantity of coal added. To keep the fire in this way overnight is an economy in wood and coal. It also makes the early breakfast of the commuter possible without undue early rising on the part of the cook. Once or twice a week the fire should be allowed to go out, the interior cleaned, the top blackened, and a fresh fire built.

Ashes should be sifted. There is nearly as much combustible matter in cinders as has been already burned. Some people mix them with the fresh coal, or keep them for replenishing the fire at odd times, reserving the fresh coal for baking or when a strong heat is needed on the top of the stove.

Too large coal is a mistake. A small stove should not be fed with anything larger than nut coal. Large ranges can use small egg coal. The white and red ash coals ought to be mixed for the use of the kitchen. The former burns more slowly than the latter, but the latter makes a hotter fire and leaves fewer cinders.

THE SAFE AND REFRIGERATOR

When food is taken from the table only the scraps on the plates should be thrown away. The cup of soup in the tureen is the stock for sauce for the next day. The tablespoon of cream in the pitcher belongs to the cook for her custard or mashed potato. The spoon of string beans or peas is already cooked for a vegetable salad or a garnish for the chops of the next luncheon. Cold beefsteak will help out the stock pot or dish of hash, or, sliced very thin, it is an unexcelled relish. The odd chop or two needs but to be minced fine and mixed with mayonnaise to become delicious filling for the raw tomato, or with bread crumbs for the baked green pepper. When the housekeeper in the morning surveys the contents of the safe she will often find the bill of fare for the day decided for her by just these unconsidered trifles.

They should never be left to sour and spoil, however. The safe and refrigerator need daily setting to rights and weekly cleansing. It is important that the safe especially should be washed often with hot water and soda.

The subject of the refrigerator has been thoroughly treated in the "Cook Book" of this series, but perhaps a few words from our own experience may not come amiss. The disagreeable refrigerator taste is often due to the lack of fresh air, more often to the constantly soaked condition of the wooden ice racks. The most modern refrigerators have metal

racks, which are far better. When wooden ones are used they must be thoroughly dried at least once a week on the range.

Too much care can not be used in keeping the drip pipe clean. When it empties into a pan it can be well scrubbed with the slender bristle brush made for the purpose and hot soda and water. If the pipe is set and carries the drip out of doors, the end may be stopped with a cork and the soda and water left in it for an hour or so. When this method of cleaning is not possible, frequent scalding with a great deal of hot soda and water must be made to answer the purpose. The amount of slime which can collect in this innocent-looking pipe is astonishing to one who is unacquainted with its ways.

THE CARE OF THE STORE CLOSET

The city dwelling, where every inch of space is valuable, has as a rule none to spare for a store closet. Nor is the need of the accumulation of groceries great when many corners furnish grocery stores whose contents are available at five minutes' notice.

In the country, where supplies must be brought from a distance, such a closet is a necessity. It is also a saving, for there is a considerable economy in buying in quantity. It is also a care.

The homemaker should keep the key of such a storeroom, and give out the provisions at stated times. She must not allow herself to become a slave of the key. The pad and pencil in the kitchen are there for the purpose of helping out the memory of the cook as well as of the mistress. This is one of the departments of housekeeping where the homemaker must strive to be ahead of both her own work and that of the cook. A hard and fast rule of opening the storeroom but once a day will not suffice. In the hands of a perverse and disagreeable woman it might be made a very unpleasant boomerang, recoiling on the homemaker and her family. Where the pad and pencil are acknowledged as aids and the homemaker devotes her whole mind during her daily visit to fore-

seeing the needs of the coming meals, there should be no chance for further demands on the storeroom key.

The homemaker should attend personally to the task of giving out the stores. By so doing she can keep the rate of consumption in her mind. A very little experience will tell her if things are going too fast.

While the pad and pencil are not neglected in the kitchen, the homemaker should also keep her own set in the storeroom, ready for the entry of memoranda for the next purchase of groceries, as well as the dates of buying certain articles. These are, of course, on the bills, but a memorandum at hand will save some minutes of seeking for the bill in question. It is most necessary to know when the large supplies, like barrels of sugar and boxes of tea, are bought.

The care or the neatness of the store closet falls naturally on the homemaker. The list of the week's work should set apart a portion of some morning for this purpose. If not neglected, it will occupy but a few minutes to rearrange the cans as their ranks thin, and to keep the floor free from all grains of sugar or tea spilled in transit from barrel or box to the kitchen receptacle. If there is a regular time for doing it there will not be any feeling of hindrance when it is done, which is the most nerve-wearing sensation to a conscientious housekeeper.

When any signs appear of the presence of ants or roaches there should be a thorough cleaning instituted and plenty of caustic soap applied to the shelves and floor, as well as the precautions appropriate to the species written of elsewhere.

Authorities differ as to the propriety of covering the shelves of the storeroom with paper. The painted wood, often wiped with soap and water, is the most hygienic, of course, but in the case of an incursion of roaches or ants the best way to discourage them is to spread the shelves with a substance which is deadly or painful to them and put paper over it, both for the looks of it and to prevent the powder from scattering.

The homemaker will find these periodic and the sometimes unexpectedly necessary cleanings much easier if she rigorously

banishes from the storeroom all rejected articles from other parts of the house, such as extra china, etc., and limits its contents to provisions and things strictly for use, like brushes, paper, twine, and the like. The enforced dusting and pulling round of the things on the top shelf, of no present use and too good to throw away, is one of the preventable trials of the homemaker. They should go where they need to be tidied but semi-occasionally.

It goes without saying that the window of the storeroom, if it is so favorably placed as to have one, should be screened all over. No sliding screen should be allowed. Every effort should be used to debar the entrance of insects from the outside. If the storeroom opens out of the kitchen it will be well in summer to tack a muslin curtain on the top shelf, allowing it to hang down to the level of the lowest. The kitchen fly is the least cleanly of his uncleanly tribe, and should be discouraged as much as possible.

XXI

IN THE LAUNDRY

How to Wash—White Goods—Washing with Kerosene—Flannels—Blankets—Pillows—Colored Cotton Articles—Silk Garments—Colored Embroideries—Lace Curtain—Fine Lace—Starching—Raw Starch—Ironing—Rough-dry Laundries—Care of the Laundry Room—Useful Laundry Receipts

HOW TO WASH

IN the old days when one learned housekeeping at home—and as a general thing did not learn it—the laundry and its work were the bugbear of housekeeping. Nothing more helpless can be imagined than the young housekeeper before the basket of badly washed and worse ironed clothes, absolutely ignorant of how they should be done, though knowing quite well how they should look. Now the girl who desires to begin life well equipped needs but to avail herself of the advantages offered for technical instruction. (See illustration of the laundry class in the Teachers' College of New York, Plate XXXII.)

We must concede that the most severe and the most insistent work of the household is the washing. It is the one part of the domestic scheme in which economy is the most necessary and the most galling. For the woman who can do her own washing it is a question of time and strength, while with an unlimited purse it is sometimes impossible to get the labor to perform the work. It is not so long ago that at one summer resort the laundresses struck in the middle of the summer, not for higher wages, but because they were so worn out that they demanded a two weeks' rest. There is a certain amount of consideration required from the wearers of white dresses and ruffled skirts, especially in the co-operative housekeeping. A well washed and ironed article deserves careful wearing. The consciousness that a visit to the tub and ironing table will make it as good as new should give way to respect

for the amount of labor which was imperative to bring it to its present perfect condition.

Where the family circumstances permit of a regular laundress in the house, the work of the laundry can go on without interfering with that of the rest of the house. When circumstances do not permit the laundress, the concessions which must be made in the cooking and other work should be made cheerfully, and taken as a matter of course, and by all members of the family. When we hear the housekeeper say at intervals, "Oh! how I hate washing-day!" it is only fair to conclude that it is the complaints of the others in the family which have forced the consciousness of discomfort into her mind. Where washing-day merely means a slightly greater activity on the part of each one there is no hardship in that activity.

When a laundress may give her time to the wash, she divides the work so that she washes and irons each day, and before the end of the week has everything back in its proper drawer or cupboard. The beds are changed on Friday, and the bed linen washed on Saturday. On Sunday the personal clothes are collected and sorted. On Monday, after the Saturday's wash is sprinkled, the flannels are washed and ironed. This is perhaps the most delicate part of the week's work. One careless washing would ruin an expensive flannel article forever. On Monday afternoon she irons the articles of the Saturday wash which she sprinkled in the morning. On Tuesday she washes the personal clothing, ironing handkerchiefs and small articles in the afternoon. On Wednesday she washes the table linen and finishes the personal washing. Thursday is devoted to the table linen and what odds and ends may have remained over. On the cook's day out the laundress must so arrange her work as to be able to cook and dish the dinner which has been left prepared for her. Friday is the cleaning day and her day out.

In small families the laundress often doubles her work with that of the chambermaid. In that case she puts the bedrooms in order while the family are at breakfast, and does the

thorough cleaning of the rooms, one at a time, on her least busy days.

When there is no regular laundress it is well to collect the clothes all at once. This is generally done the night before the washing day. They must be sorted and each kind washed by itself.

No article should go into the wash torn. A little hole may become a very large one in the course of the passage from tub to line and ironing board, particularly if there is a high wind blowing during the time of drying.

It is well to look over all articles of clothing before they are put into the clothes basket. Muslin dresses, all articles trimmed with lace, and shirt waists should be well looked over and needed stitches taken. Silk stockings in especial should never go into the wash undarned.

Good housekeepers are divided as to the method of washing. It would seem that such an amount of chemical as would remove the dirt and prevent too severe rubbing would be of advantage to the fabric provided the rinsing were thorough. With hard water some softening agent is imperative. All chemicals should be dissolved before adding to the water. It must be borne in mind that the chemical is not intended to do all the work. It hastens it only.

There is a division also on the subject of soaking and boiling. It seems reasonable that clothes which have been soaked in warmish water, with some alkali in it, will have the dirt to some extent softened and ready to be washed out. Boiling forces the water through the meshes of the fabric and drives out the dirt. Both are advised.

WHITE GOODS

White goods should first be looked over for stains, and the stains removed before the article goes into the tub. Soap and water will set some stains beyond further help. Directions for removing stains are given elsewhere.

A soap jelly should be made before the work really begins. This is made by shaving laundry soap and dissolving it at the

back of the range. It must not boil. It can be put in the oven to dissolve. No more water should be used than will cover the bits of soap. All small pieces of soap left from previous washing can go into this jelly.

It will need three tubs to soak the one day's white wash. The tubs should be filled with tepid water, and enough of the soap jelly added to make a strong suds. The clothes are sorted into three lots according to their condition of dirt, and put each in a tub, each of the three piles being looked over again so that the most soiled may go at the bottom and the cleaner at the top of the tub. If soda is used it should be mixed with the water before the clothes are put in. A little soap is rubbed on very soiled places.

Another way is to rub soap all over the soiled side of a garment. The soapy side is then turned inward and the garment rolled up into a bundle. This and other similar bundles are packed down into a tub of warmish water.

Colored clothing is never soaked or boiled, nor are stockings or flannels.

In the morning the two tubs of the cleaner clothes are to be wrung out and the tubs washed. These are then filled with water as hot as the hand of the laundress can bear, and the clothes washed out, soap being used in rubbing when necessary. The boiler is put on the stove about half full of cold water. As the clothes are wrung out after rubbing, they are dropped piece by piece into the boiler. When this is full the fire should be lighted and the clothes allowed to scald. They should be turned over with a stick, and not allowed to burn on the bottom. If soda is used the proportion is a tablespoon of liquid soda to every three pails of water. The third tubful is then washed in the same way.

When the boilerful is scalded the clothes should be rinsed in cold water, put in a tub of bluing water and wrung out. The clothes are then ready to dry. The exigencies of city life sometimes make it necessary to use heat in drying clothes. Nothing, however, can take the place of the fresh air and sunlight. There is a marked difference in the odor of

sun-dried clothes from that of those dried by heat or in an attic.

Ball bluing is safer than the liquid blue for an inexperienced washerwoman. The balls are tied in a flannel bag and moved around in a bowl of tepid water until the liquid is a deep dark blue. This is emptied into the tub. If it is sky blue when dipped up in the hand, it is dark enough. Clothes should never lie in the bluing water, since it will make them look streaked. It may be necessary to add a little more blue to the water if there are many clothes to rinse.

WASHING WITH KEROSENE

Kerosene is a most admirable detergent for white clothes. It has a bad name, however, on account of the very unpleasant odor which fills the house while the process is going on. For people who have a laundry separate from the house or on the top floor of an apartment house there can be no better method of washing. The clothes have no odor, and are very white and *soft*, a quality much to be appreciated by those who suffer from the harsh texture resulting from too lavish use of chemicals.

The clothing should be soaked in the usual way. In the morning the tub in which they have been should be filled up with hot water and the clothes rubbed out.

The boiler should then be filled one half with boiling water, not cold as in the usual way, with enough soap jelly added to make a strong suds. To this is put two tablespoons of kerosene. The boiler should not be too full of clothing. This should boil half an hour.

The clothes are then removed to a tub half full of suds. Enough cold water is added to the suds in the boiler to fill it half full again, and enough soap jelly to make the suds strong. When it boils, one tablespoon of kerosene is to be added, and the boiler refilled with clothes. While this lot is boiling, that which has come from the boiler is to be washed out and rinsed in three waters. It will be seen that the labor of rubbing is much lessened from that necessary in the other method.

Clothes so washed should be dried in the sun. If properly rinsed there will not be the slightest odor of kerosene.

FLANNELS

Fannels, as we have said, must be washed by themselves, and with great care, to keep them from shrinking and hardening. One careless washing will ruin them beyond repair.

They must be well shaken to get the dust out. Some particular laundresses brush them. The tub must be half full of warm, not hot, water, with enough soap jelly stirred into it to make a good lather. If the water is hard or the flannels greasy, a little ammonia may be added to the water, in the proportion of a tablespoon for every two gallons of water. Flannels should never be rubbed, but squeezed in the hands under the water. After being well washed in the first water they should be turned inside out and washed again in fresh water not quite as strong of soap as the first, and then rinsed at once in water of the same temperature. This water should be changed until there is no soap in the flannels and they feel quite soft. The last water may have a little bluing in it if desired. Flannels should be only about half dried before ironing. Before they are hung out they should be pulled gently into shape, and again after they are brought in. They should be ironed with a warm, but not hot, iron. They must not be ironed wet, or they will shrink. They must not be washed in too hot or too cold water, they must not dry too slowly, nor in too hot a place, so that they steam, and they must not be ironed with too hot an iron. This sounds very difficult, but a very little practice will make it seem both simple and easy.

Colored flannels are washed in the same way, omitting the ammonia, unless the water is very hard. A little vinegar in the rinsing water will restore the color to faded blue flannel, as well as to some shades of red.

BLANKETS

Blankets should be washed only on a clear day. If it is rather windy, so much the better.

Two tubs should be half filled with moderately hot water. Enough soap jelly should be poured into one to make a strong suds and about half as much into the other, with three table-spoons of borax dissolved in a quart of water equally divided between both tubs.

The blankets must be well shaken and looked over for soiled places. They are then put into the first tub and sopped up and down until they look clean. This is the time to use the air-press washing machine, if one has it. They are then put through the wringer into the next tub, and again washed and wrung. They should then be looked over for soiled places, and if spots still remain they should be spread over a board and scrubbed with a brush. This injures the blanket far less than rubbing on a board or between the hands. Foreign washerwomen use a brush for all fabrics in place of a rubbing board.

When wrung out they should be well shaken and then hung out to dry. They should be pinned lengthwise on the line, and a great many pins used to keep them from sagging in scallops.

When perfectly dry they may be taken in and folded evenly, and be pressed by means of weights put on top of a board. The board should cover them, with room to spare. They should remain under the pressure at least two days.

PILLOWS

It is the practice of many housekeepers to expose their pillows and down quilts once in a season to the summer rain and then to dry them on the clothesline in the sun. This is sufficient cleansing for the quilts. The cover may fade and shrink a little, but the down is made quite fresh and sweet. A feather pillow, however, will collect an amazing amount of dust, even when kept scrupulously covered, and requires real washing once in a while.

The pillow, after a thorough beating, should be boiled for an hour or so in strong soap-suds and rinsed by squeezing it in a tub of warm water. All the moisture possible is then

wrung out and the pillow hung on the line. The feathers will be a soggy mass in the bottom of the tick. The tick must be reversed each day. As the feathers dry they will rise. When perfectly dry there will be no lump or solid ball in the tick. It will take about a week for them to dry. All pillows which have been used during an illness and which are not burned should be treated in this way.

The tick will be much fresher for its cleansing, but most people prefer to change it after washing. The new tick should be so made that the open end is selvage. There need be no scattering of feathers if the transfer is properly made. The feathers are forced away from one end of the pillow. Then about an inch below the end the tick is basted closely together. The end is then ripped, each inch being secured by pins to prevent the escape of the down. One side of the new tick is then basted on the old one. As the other side is basted to the other side of the old cover, the pins are removed one by one. When the two are sewed together, the first basting is removed and the feathers forced by the hand into the new tick. The basting is then ripped sufficiently to allow the hand to be put in and the stray feathers collected from the corners. The new tick is then pinned closely before the old one is ripped off, and the end then sewed overhand. If well done there should not be even a trace of down on the worker's apron.

COLORED COTTON ARTICLES

Colored cotton articles should not be washed with other clothes. They must never have alkali in the water or strong soap put on them. The water should not be hot, but warm. If soap is used it should be in the form of soap jelly made into suds. All colored goods should be rinsed twice with salt in the water. For blue garments it is well to put a cup of vinegar in the last rinsing water. When they are starched they should be starched with boiled starch before they are dried, and dried in the shade as quickly as possible; and they should never be washed on a wet or damp day. They should be dampened only a little while before being ironed.

For soap, starch may be substituted in washing colored fabrics. Any kind of starch may be used. There must be enough to remove the dirt, and it must be strained so that it will not be lumpy. Common flour is used, or cornstarch, fine laundry starch, grated potatoes, rice flour, or the water in which rice has been boiled. The starch should be made as thick as cream and then diluted with four times its volume of water, for the first washing. For the second the quantity of water should be doubled. To make such starch half a cup of cornstarch or rice flour is mixed with one pint of cold water. On this, stirring all the time, is poured three quarts of boiling water. It is cooked for five minutes, well stirred; three quarts of cold water are added, and it is strained. If flour is used the quantity must be a cupful. Fabrics washed in this way have the texture and appearance of new goods.

Cretonne should be washed in bran water. It will come out fresh and will not fade. In washing all goods of this description, as well as figured muslin curtains, there must be no sprinkling and rolling up to lie in the basket. They are to be partially dried in the shade and ironed when half dry.

Stockings should always be washed by themselves. Cotton stockings especially collect lint from other articles. It is recommended that a little vinegar be added to the water in which they are rinsed after being washed. The stockings should then be dried wrong side out and in the shade. Colored stockings so treated will be found unfaded, and black ones will retain their original lustre.

SILK GARMENTS

Articles made of silk, or white goods embroidered in silk, should always be washed in tepid water with either Ivory or castile soap. A very little borax may be used, but there should be no ammonia in the water unless the silk is naturally *écru* in color.

The silk garments are allowed to stand from twenty minutes to half an hour in a suds of tepid water to which has been added one teaspoon of borax dissolved in a quart of boiling

water. They are then washed with the hands, rinsed in two waters, put through the wringer, and hung out to dry. When about half dried they should be taken in and spread on a sheet and rolled up. They may be pressed in an hour or so. The iron should be rather cool, and there should be a clean cloth or piece of manila paper between the iron and the silk.

Pongee waists should be washed carefully with any good soap, and thoroughly rinsed. They should be as dry as possible and ironed without being moistened; indeed, it is impossible to iron them when damp. They can be ironed on either the right or the wrong side. They look best when ironed on both sides, probably because, being so dry and not very thin, it is necessary to press both sides in order to put them in their original condition.

It is commonly supposed that the wash-silk waists, those with raised cords, have to be ironed. As a matter of fact an iron should never be used on them. They should be washed in borax water or with Ivory soap and wrapped in soft towels and gently squeezed till most of the water is out of them, then gently shaken till the folds and wrinkles are out, and hung up to dry. When dry they will be found in proper condition to wear.

White wash-silk waists have kept their ivory tint through two summers' frequent laundering by this process: A quick washing in a tepid suds of naphtha soap, rubbing soap on spots if necessary, two generous rinsings in clear, tepid water, a squeeze out and tight roll in a towel, and after an hour's drying a quick ironing with well-heated irons.

Chiffon, especially white and light-colored chiffon, will bear washing several times if carefully handled. Veils, unlined waists, scarfs, even accordion-plaited skirts, may be washed at home.

Plenty of warm water in which a little borax has been dissolved is used. The goods are rubbed gently in the hand, and the dirt squeezed out. They are then rinsed in clear water.

To dry them a clean sheet is stretched over the bed and tightly pinned down. The chiffon is pinned to this with plenty

of steel pins, and drawn into shape and quite smooth. The process is easy with veils and scarfs, and not impossible with waists.

Before accordion plaits are washed a basting thread should be run through the lower edge of all the plaits, gathering them into a bunch. After being washed the plaitings should be hung in a draught with a weight attached to the edge to keep the plaits straight.

COLORED EMBROIDERIES

Colored embroidered articles should never be put in the home wash. They are to be trusted only to the hands of skilled labor. Nor should even the most accomplished laundress ever be tempted to do too many at once. It is emphatically "piece work." There must not be an interval of a minute between the rinsing water and the iron.

Soap should never be put on colored embroideries. A very good suds is made from some standard soap, and the article washed in that. Ivory soap is always reliable, and fels-naphtha soap is very cleansing, but all cheap soaps should be avoided.

The water should be hot, but not boiling. The embroidery should not be rubbed or squeezed, but have the water forced through by patting between the hands. The rinsing water should be the same temperature. The cloth should not be wrung. As soon as it is rinsed it must be spread upside down on the ironing board and dried with a fairly hot iron. When nearly dry it is turned right side up and ironed. If the embroidery is laid-work, care is taken to touch only the linen with the iron. If it is flat the whole piece is ironed again and again until silk and linen are both highly polished.

When the first piece of embroidery is ironed, it is time to begin washing the second, and not before. If there is no interval between the washing and ironing the colors should not run.

If a centrepiece is surrounded by lace, especially if it is any of the very spreading open handmade laces, this should

not be ironed. After the centrepiece is ironed it should be pinned out on a mattress or couch, or even on a pine board, with a pin in each scallop. The lace is then stretched out into shape and pinned down.

Such articles may be starched with gum-arabic or gelatine, but lightly and with care. Colored embroideries are never blued.

LACE CURTAINS

Lace curtains should be gently but thoroughly shaken, to remove the dust. They are then put into a tub of hot suds, and the water forced through them with the hand. They must not be rubbed or wrung by hand. There is a washing machine which is admirably adapted for washing lace and delicate goods of all kinds. It is in the form of a trumpet with an enlargement at the bottom which is bell-shaped. This forces the water through the goods when the mouth of the bell is submerged. A very gentle motion of the arm is all that is necessary. No break or tear is possible. It may take several changes of water to cleanse the curtains. When the curtains are very much soiled they should soak overnight in water in which half a pound of soap dissolved in two quarts of water and two tablespoons of borax have been mixed. In the morning they can be washed in hot suds with a tablespoon of borax added.

All lace curtains should be starched. The heavier and coarser the lace the more starch will it require to make it look well. Fine lace does not need much starch. Very few lace curtains are blued at present. A slight *écru* tint is preferred or in some cases a real brown. Tea, coffee, or saffron is used as coloring matter. Tea gives a yellow-brown tint, coffee a much deader color, and saffron a real yellow tone.

Directions for drying curtains give numberless expedients for stretching them. The only really satisfactory way is to use a frame. These can be bought at the department store. The frame consists of two strips of wood long enough to hold the long city-house curtain, two cross pieces, and the bolts which fasten them together. Along the edge of the wood is

a row of very slender steel hooks set close together. It is the work of a few minutes only to slip the edge of the curtain over the hooks. Two pairs of curtains can be put one over the other and if the frame stands in the open air they will dry very soon. In this way the curtains may be dried of the same length. They should be measured before they go into the tub, and the length and width written down. The frames are then set to this measure.

When a curtain frame is not to be found, the old-fashioned quilting frame can be used, the lace being pinned to the strip of cloth tacked on the edge. Failing that, the best thing to do is to pin the curtains out on the floor over a sheet. This is very back-breaking work. One noted authority recommends using a mattress, but in that case the curtain must be doubled back on itself.

FINE LACE

The knack of washing fine lace lies mainly in the drying. Lace should never be ironed. It loses all its softness and looks cheap and common. This is the method used by the French laundresses. The lace is sopped and gently squeezed in a suds which has a little borax in it. Ivory soap is excellent, though the fels-naphtha is even more cleansing. The lace is rinsed in warm water and starched very lightly. The starch should be only of the consistency of milk. Gum-arabic may be used instead of starch.

A bolster is pinned up in towels drawn close until it is hard and firm. The lace is then pinned round the bolster with a pin for every scallop. Valenciennes lace needs a pin for every purl on the edge. It takes time and patience, but the reward is lace which looks exactly like new. The starch must be very light, and the lace should never be blued. Real laces do not need any coloring, but the cheaper ones may be tinted with tea, coffee, or saffron, according to taste.

STARCHING

Starch should be prepared by mixing with cold water and rubbing smooth. Boiling water is then poured on and the

starch stirred over the fire until it is clear. Wax and borax are added while it is cooking, to give gloss. The borax aids in keeping the stiffness in damp weather. The stiffness depends upon the proportion of water used.

One tablespoon of starch to two tablespoons of cold water and a gill of boiling water is the thickness required for shirt bosoms, cuffs, and collars. Half a pint of boiling water to the same amount of starch and cold water is the consistency required for coarse lace curtains, the collars and cuffs of shirt waists, etc. With a pint of boiling water, the same amount of starch is right for skirts or dresses. Mixed with two quarts of boiling water it is exactly right for table linen and articles which should have only a suspicion of starch.

Some authorities advise straining the starch. It is not necessary if the utensils are perfectly clean and the starch is well stirred while cooking. Sometimes the starch itself is gritty. In that case it should be strained before the boiling water is added.

Boiled starch is used while the articles are wet. It should be hot. The garment should be turned inside out and the starch clapped into the fabric. It is the even distribution which is important. It should not come through to the surface. The laundress, before hanging the article up to dry, strips off any starch which may have come through by passing the cloth between her thumb and finger. Every inch of surface should be so treated. The starched clothes should be dried thoroughly and be sprinkled and rolled up an hour or two before they are ironed. Starched clothes are much more likely to mildew in damp hot weather than those which are not starched, and should never be sprinkled overnight when the atmosphere is heavy with moisture.

In winter the laundress must bear in mind that freezing spoils the starch and makes the cloth nearly as brittle as glass.

RAW STARCH

To make articles very stiff it is better to starch moderately and add raw starch before ironing. One tablespoon of starch,

half a pint of cold water, half a teaspoon of borax, and a few drops of turpentine are mixed together. This settles immediately, and must be well stirred before it is used. The pieces to be starched must be dry. They are to be dipped into the starch and rubbed as if they were being washed. When squeezed dry they should be placed on a clean sheet and rolled up. One article should not lie on another. Some laundresses then run the sheet through the wringer. It is not necessary for small articles. The articles should be ironed in half an hour after being starched, with a *hot* iron. A piece of thin cloth should be between the article and the iron until the article is about half dry. Then it may be ironed until dry with the bare iron. The fabric should not become dry before ironing. Every laundress keeps a bowl of cold water on her board and a bit of clean cloth, with which she dampens the linen if it seems dry.

Raw starch is easy to make and requires very little adroitness in its use. The skill comes in the ironing. The cloth must be wet and must be ironed until perfectly dry.

Gum-arabic is an excellent stiffening for laces or sheer muslins. It has not the pure whiteness of the commercial starch, but for that reason it is better for some fabrics, especially fine old lace, which loses its chief charm if too white.

An ounce of gum-arabic is put in a wide-mouthed bottle with half a pint of cold water. This must stand in a pan of water over the fire until the gum is dissolved. The water in the pan must be cold at first, so that the gum will warm gradually as the water heats. When dissolved it is strained into another bottle, and when cold half a gill of alcohol is added. The bottle should then be well corked. The solution will keep for years. It should be diluted for use.

Gelatine and isinglass are used to stiffen colored fabrics. One-fourth of an ounce of gelatine is soaked in half a pint of cold water for one hour, and then a quart of boiling water is stirred in. It is then strained and is used like ordinary starch. The boiling water may be tinted with tea or coffee if a yellow tone is desired.

IRONING

The heaviest part of the work is done when the washing is over, but not the most tiresome, nor that which takes the longest to do or the most skill to accomplish. A good ironer must understand just how to keep her fire going, and what heat is necessary for the proper pressing of the different articles of clothing.

The greater part of the labor, however, lies in dampening and folding the clothes. All articles are not dampened and folded alike. Flannels, as we have said, are ironed while they are still partly wet, and all colored clothes are dampened just before ironing.

The articles are sprinkled and sorted as they are sprinkled. The sprinkling is done with a brush and warm water. When all are sprinkled they are rolled up in separate lots. The napkins are smoothed out, the edges drawn even, and laid one over another smoothly. When all are in the pile they are firmly rolled and wrapped in a towel. Towels are folded in the middle with the edges drawn perfectly straight and the fold evenly laid. One towel is placed on another, and the lot rolled up. Sheets and tablecloths must be folded in the middle and the sides and corners matched with great care. It really needs two persons to do this properly. Sheets and pillow-cases need be dampened only slightly—sheets especially need not be dampened at all—but table linen should be quite damp, and starched pieces very damp. Underwear needs to be only moderately damp.

The irons must be perfectly clean both on top and on the bottom. If they are at all rough they should be rubbed with emery paper and a little salt. The cake of beeswax is a great aid to smooth irons. There should be a couple of sheets of manila paper on the side of the ironing table to rub the iron on before beginning to press.

The iron should move with the grain of the cloth, lightly at first and then more heavily. The greater the pressure the more gloss.

It is when we come to the ironing that we find the advan-

tage of the systematic folding. Sheets are ironed four double, and doubled in half and ironed, doubled again and ironed. When the doubling and ironing have been repeated the third time the sheet is done. It may now be seen how necessary the even folding was.

Tablecloths should be ironed in a single thickness and then folded and pressed. The fewer sharp creases in tablecloths the better. Napkins should be ironed on both sides and folded so that the embroidered marking is uppermost. Both tablecloths and napkins should be ironed perfectly dry. They are not hung on the frame to air, but left on some flat surface until the ironing is finished, when they will be ready to put away.

Handkerchiefs are also ironed on both sides. Handsome handkerchiefs are folded but twice. Plain ones four times, always with the embroidered initial or monogram uppermost. Both handkerchiefs and napkins should have the borders pulled perfectly even and ironed first. Towels must be folded lengthwise in three, if marked in the centre of one end. All embroidery should be ironed on the wrong side, to make it stand out handsomely.

When one does her own ironing there are ways to save labor at the expense of a little concession of prejudices. A busy woman in the West invented a way of ironing sheets and towels which did away with more than half the work. She folded her sheets very carefully, and laid them on top of each other on the ironing table. On them she spread the towels smoothly and did her other ironing on them. By the time she had finished the personal wash her sheets and towels were mangled for her, needing only a little attention at the corners and the smooth of the iron as she folded them. Table linen and pillow-cases should never be scamped in the ironing, but there is no reason why one should be a slave to dish and roller towels.

Stockings certainly look better in the basket if ironed. The hot iron, however, helps to make them hard and wiry in the feet, and it is now quite customary to leave them unironed.

For the woman who does her own mending and never allows them to be put into the drawer until rolled up neatly and doubled over, the time spent in pressing may well be saved.

When the ironed clothes are aired there still remains a delicate and necessary job to be done. Each article taken from the horse should be folded and smoothed by the hand, and laid lightly and smoothly in the basket, the heavier articles at the bottom. Underwear may be buttoned to fold. The laundress should have a box of cheap pearl studs for shirts both starched and negligée. It is impossible to fold them well if they are loose at the neck, and the practice of pinning them is extremely detrimental to the fabric.

ROUGH-DRY LAUNDRIES

In the large cities the washing can be done out of the house either wholly or in part as is desired. The possessor of a very tiny flat will find it a great accommodation to get that part of the work done away from home. Rough-dry laundries mangle the sheets, pillow-cases, and tablecloths, and charge by the pound for the work at the rate of five cents a pound for the washing, starching, and ironing. The other pieces are sent home rough-dry, to be ironed in the house. As a sheet will weigh from one to one and a half pounds, a tablecloth a pound and a half, and three pillow-cases a pound, the average cost of a family washing, counting on four beds and table service to correspond, would be from ten to twelve pounds at least. This is a little more than half the wages of a washerwoman, taking the day's work at the lowest rate for skilled labor of that kind. The saving in soap, starch, and meals is about double the difference in the price of the work, and not to speak of the comfort of not having another person about in the small space the apartment affords. The ironing, which must be done at home, is the lightest and easiest.

This arrangement does not consider starched shirts, collars, or cuffs. They must go to the laundry as usual.

CARE OF THE LAUNDRY-ROOM

After the washing is over the laundry should be put in order ready for the next washing. Water which has been used for washing or rinsing should never be allowed to stand in the tubs; nor should starch be left to become mouldy and invite mildew and other parasites. The floor should be swept and also mopped, the wringer examined and put in order, and the ironing board prepared for the ironing.

To iron at ease one should have a large table covered with a folded blanket and sheet. There should be an iron stand, a bit of sandpaper, a saucer of salt, and a piece of beeswax in a cloth ready for the irons, as well as a clean holder or so. A change of holders is a great rest to the hand.

When the clothes are taken from the line the clothespins should be collected and brought in in their basket. The ground next to the post is no place to keep clothespins from week to week. It is true that clothespins are a remarkably cheap commodity. Still waste of any kind is in itself wrong, and waste in clothespins may be extremely inconvenient of a Monday morning miles from town. Many people have the clothesline brought in also. This is possible when there is but one washing a week. That is very seldom the case, however. Besides, the clothesline is extremely useful to other branches of the housekeeping for airing and drying. In the city lines should be wiped with a clean damp cloth before the garments are hung up on them. It is a wise precaution anywhere, but imperative with the smoke and soot of our cities.

Ironing sheets and the cloth of the skirt board need renewing at intervals. The cover of the skirt board should be well tacked on, and the pad of cotton batting beneath quite thick. One necessity for the laundry is the large shallow basket which stands under the skirt board to keep the clothing from dragging on the floor. In this basket should be a piece of white cloth which will prevent lace or embroidery from catching on the mesh of the basket.

A useful part of the laundry outfit is the sleeve board, which slips inside shirt waist sleeves and makes ironing them

easy. When it is properly used the sleeve board obviates the ugly crease down the back of the sleeve.

A convenience for the laundry of the apartment house is the gas iron. It is really a gas stove with a tube attachment, and it is so arranged that the flame may be regulated at will. Much time, and probably much gas also, may be saved by the use of this iron. Electric irons are useful for pressing small things, and are utilizable where the house is fitted with electric wires.

In fly time it is well to provide some yards of mosquito net, to put over the frame while the clothes air. A couple of flies will disfigure a whole morning's work in a very little time.

In housekeeping the value of apparently worthless things is continually being proved. It appears nowhere more than in the laundry. There is a continual demand for bits of cloth for rubbing, strips of cotton to cover baskets, to wrap round the rolls of dampened clothes. All old towels and wornout sheets find a field of usefulness here, while discarded pillow-ticks need only a few stitches to become the very best kind of holders for the hot irons.

The clothes hamper is often a neglected piece of furniture. It should be scrubbed once in a while with salt water, rinsed with clear water, and aired in the sun frequently. Take advantage of wash day when the hamper is empty.

USEFUL LAUNDRY RECEIPTS

TO CLEAN SILK

To clean silk, three or four large potatoes are grated and allowed to stand in a pint of cold water for an hour, when the liquid is strained off.

The silk is spread on a board or table, and well washed with the liquid, then dipped into cold water to rinse it. It is then hung up to dry. When half dry it may be ironed on the wrong side with a moderately hot iron, or pinned out on a sheet on the floor. The latter is the better way if time will permit. The grated potato, after the liquid has been drained off, is recommended for cleaning cotton goods which it is not

advisable to wash. The potato is simply rubbed on the fabric, which is subsequently rinsed.

TO USE SOAP BARK

All woolen goods and black silk can be washed with soap bark. This is excellent to remove grease stains. The soap bark is sold at the druggist's in small packages. A handful is put into a saucepan with cold water and allowed to steep for ten minutes. The water is applied to the fabric while quite warm, being scrubbed in and then sponged off with clear water. The material is then ironed when half dry or pinned out as above. The water in which the bark is steeped may be strained into a tub, tepid water added, and the material regularly washed.

TO CLEAN BLACK CLOTH

Black cloth can be washed in ammonia water in the proportion of one ounce of bicarbonate of ammonia to a quart of water, and well rinsed.

TO CLEAN FURS

Dark furs may be cleaned with hot bran. The bran is made very hot, but not allowed to burn, and is rubbed into the furs. There should be two or three applications. The furs are then well shaken and brushed to remove any dust which may remain.

Light furs should be rubbed with bran moistened with warm water, applied with a flannel rag. They should be rubbed dry and then rubbed with dry bran and a piece of book muslin. They are then rubbed with magnesia. Dry flour may be used instead of wet bran. One should rub against the fur.

TO TAKE OUT FRUIT STAINS

Fresh fruit stains should be rubbed at once with salt. This will keep the spot damp until it can be treated with boiling water. The water should be poured through the cloth as it is held over a basin. No soap should be used. Soap will set fruit stains irremediably unless they are well rinsed before they come in contact with it. But where the stains are of long

standing they should be rubbed with soap and covered with a thick paste of boiled starch and the garment put in the sun. The starch should be kept damp. If after a day or two of this treatment the stains have not disappeared the starch and soap may be washed off and the process repeated.

Stains of wine, acids, and acid fruits may be removed from colored cotton goods, woolens, and silks by the application of dilute ammonia. This should be put on carefully with the finger wrapped in a cloth and the spot as carefully rinsed afterward. In cleaning small spots the motion should always be circular. There will be no mark of a rim about the spot if this is remembered.

Very delicate fabrics may have a paste of prepared chalk and water laid on and brushed off when dry.

Chloride of lime is also recommended for fruit stains. A large, but not heaping, teaspoon of chloride of lime is dissolved in an eight-quart pail of cold water. The garment is soaked in this solution and squeezed occasionally. In twenty-four hours or less, according to the extent of the stain, the garment will be quite clean.

It must be remembered that all cleaning preparations have a certain effect on the fibre of the cloth. They must therefore be well washed off before the garment is dried.

TO TAKE OUT WINE STAINS

Claret stains should be rubbed with salt to keep the spot from drying. Boiling water is then poured through the spot, as in the case of fruit stains.

Wine stains may also be removed by holding the fabric in boiling milk.

All kinds of wine and most fruit stains will disappear if the spot is moistened and held over a bit of burning sulphur. The sulphur is wet with alcohol to make it burn. The fumes of burning sulphur are also recommended for removing stains from the hands.

TO TAKE OUT COFFEE AND MILK STAINS

Stains made by coffee and milk are the most difficult kinds to remove. From woolen goods they may be removed by a

preparation made of one part of glycerine, nine parts of water, and half a part of aqua ammonia. This is applied with a brush, left on for twelve hours, the spot being moistened with the mixture occasionally during this time. The fabric is then pressed between pieces of cloth and rubbed with a clean rag.

From silk, a mixture of five parts glycerine, five parts water, and one-fourth of a part of ammonia will remove the stain. This mixture should be tried on a piece of the goods first and if the color changes after drying the ammonia must be omitted. To restore the finish the fabric is brushed with a thin solution of gum-arabic and carefully dried.

TO TAKE OUT BLOOD STAINS

In all white goods blood stains may be washed out, using cold water and then hot. A single spot of blood on a garment will disappear if covered with starch which is kept wet for a few hours.

TO TAKE OUT GRASS STAINS

Grass stains should be washed with cold soft water before the garment is put in the tub and they will disappear.

TO TAKE OUT OLD STAINS IN LINEN

Old and obdurate stains in linen may be removed by the fumes arising from a small piece of burning sulphur (sometimes even a sulphur match will be enough) followed by washing in water in which a little soda has been dissolved.

TO TAKE OUT PAINT STAINS

Fresh paint stains may be removed from ordinary fabrics by ether, or chloroform, or turpentine. The liquid should be rubbed on with a bit of the same material as the garment.

TO TAKE OUT INK STAINS

Any of the directions already given for removing ink stains from carpets will apply equally well to other fabrics.

Fresh ink on delicate fabrics may be removed by the use of moistened cream of tartar. Wash the spot after applying the cream of tartar with cold water.

The stains of marking ink should be treated with a saturated solution of cyanide of potassium, applied with a camel's-

hair brush, and well washed with cold water after the stain has disappeared. Cyanide of potassium and the allied compounds are deadly poisons and must not be carelessly handled.

TO TAKE OUT IRON RUST

To remove iron rust, salt is mixed with a little lemon-juice, spread on the spot, and the article put in the sun after the mixture is applied. Two applications may be necessary. The spot should then be well washed with warm water.

TO TAKE MILDEW FROM LINEN

Mildew spots on linen should be rubbed with soap and then covered with scraped chalk. The mixture is rubbed in and the linen spread on the grass. It should be wet a little from time to time as it dries. The spots ought to come out in two applications.

Or the stained cloth may be dipped in buttermilk and spread in the sun. The warning previously given as to the effect of detergents on the fabric can not be too often repeated. The substance used to take out spots should be well washed out of the material or the fibres will be destroyed.

TO WASH A CHAMOIS SKIN

A chamois skin may be washed in cold water with plenty of soap, and rinsed well in clear cold water. So washed it will always keep soft.

TO RESTORE RIBBONS

Ribbons may be pressed between two sheets of manila paper. They come out looking like new. Or they may be laid evenly on a board or table and dampened with a clean sponge, and then rolled tightly around a good-sized bottle.

Soft ribbons, such as liberty, satin taffeta, and peau de soie, may be regularly washed. A basin of warm water and castile soap-suds is prepared, and the ribbons soaked, without mixing colors of course, for fifteen minutes. They are then spread one at a time on a smooth surface and scrubbed gently with a soft nail-brush. They are rinsed in clear water, and the water pressed out between folds of cloth. They should be ironed between two towels with a moderately hot iron. A

few drops of vinegar in the rinsing water will keep the ribbons stiff.

TO WASH WASHABLE GLOVES

To clean them, chamois-skin gloves should first be rubbed with magnesia or cream of tartar to remove the grease, and then washed in a lather of white soap. They should be rinsed in lukewarm water, and when cold stretched into shape to dry, or put on a form.

Buckskin gloves should be first washed as above and then pulled into shape or put on a form and rubbed with pipeclay or ochre, according to the color. When half dry they are rubbed to take off the powder and then brushed to extract the dust. They are then stretched flat and ironed with a moderately hot iron, paper being laid between the glove and the iron as well as underneath the glove.

TO CLEAN FEATHERS

Feathers may be cleaned with hot suds. They should be gently rubbed between the hands. They must be rinsed in *hot* water and shaken until dry.

TO CLEAN BLACK LACE

Black lace can be made very fresh in appearance if washed in black tea. The infusion should be as strong as if made for drinking. The lace may lie in the tea several hours and then be squeezed and dipped up and down in the tea. The liquid will become very turbid and dirty in appearance. A weak solution of gum-arabic is used to stiffen the lace. It should be pinned out with much care. All lace should be carefully mended before it is washed.

TO REMOVE WAX FROM FABRICS

To remove wax from fabrics, the wax is first melted by holding a hot iron near the spot, and then scraped off. The place is then ironed with blotting paper above and beneath it. The spot may then be washed with turpentine or alcohol or soap and water, and pressed with a rather moderate iron under cloth or paper.

WASHING PREPARATIONS

To make a good washing preparation, first dissolve four ounces of white soap in boiling water. When this is cool add five ounces of ammonia, two and a half of glycerine, two and a half of alcohol, and two ounces of ether or chloroform. It must be bottled and tightly corked. It is used in the proportion of a cup to a pail of water for spots on carpets and upholstery. The soap jelly of the laundry is also excellent for this purpose with a little borax added.

EXCELLENT CLEANING FLUID

Eight ounces of benzine, a quarter of an ounce of chloroform, a quarter of an ounce of sulphuric ether, one-eighth of an ounce of oil of wintergreen is a mixture which will clean cloth, silk, and woolen goods, and will restore the color. It must be well shaken before using, and kept from all heat and flame. All cleaning preparations should be applied with a bit of the fabric to be cleaned.

XXII

HOUSECLEANING

The Tools Needed—To Clean the Cellar--Bureaus and Closets—The Attic—Below the Attic—Window Washing—Useful Housecleaning Receipts

THE TOOLS NEEDED

WHEN a house is kept properly clean housecleaning, as we have said, need not be such a bugbear. Putting a house in order again after it has been closed for the summer is a different matter.

The regular spring housecleaning concerns mostly the places we do not live in—the places for keeping things. Attics, closets, and cellar require a thorough overhauling and a rigorous elimination of the useless and outworn articles accumulated from the last cleaning season.

There are some supplies which the homemaker should lay in before beginning her work. She needs plenty of stiff white paper for lining the bureau drawers, quantities of clean cheesecloth for dusters, old sheets for washing rags, a full assortment of brads, tacks, screws, nails of various sizes, curtain pins, and hooks. A tack hammer and large hammer, a tack lifter, a screwdriver, an awl, a gimlet, a monkey-wrench, a bed wrench, a pair of pliers, and all the different kinds of brooms and brushes needed for the work.

She should be able to use these herself. The ingenuity of woman in adapting strange tools to her use is proverbial. The inadequate results of that skill are also proverbial. Every woman who aspires to keep a house should know how to drive a nail, and have the proper hammer with which to do it. She should be as far as possible independent of masculine aid in these matters. The woman who must wait for a man to do the work runs the risk of being very much hindered.

Also before the housecleaning begins, the hardware of the

house needs to be sorted ready for use. There is nothing so prone to wander out of its proper place as screws and tacks, unless it is the tools needed for their use. There is on the market a remarkably compact arrangement known as the "handy box," containing various small kinds of hardware as well as varieties of labels, gummed tapes, etc. These are most useful and should have a place on the shelf of the tool closet.

There are many articles, however, which are not included in the "handy box," but for which there is always a call, and for which, as well as for the odds and ends left over from different repairs or amateur carpentry and upholstery, a place must be found. A box in which they may be kept together, but separated from each other, is what is wanted. If there is in the house one of these light wooden boxes in which crystallized fruits are sold it is the very thing for this home-made handy box. Slender straps tacked at the corners and crossing in the centre make the handle. Into the box are set the pasteboard boxes used by jewelers, care being taken to procure them of such a size that two occupy the entire width. They are put in in such a way that the boxes and their covers alternate. The covers are to be used for very small things like the No. 1 tacks or the smallest sized brads. Into these divisions go each kind by itself, the half-dozen cup hooks left over from the new cupboard, the blind staple or two found in the bottom of the table drawer, gimp tacks, ordinary tacks, matting tacks, brads, small-sized screws of all kinds, curtain rings, everything and anything which means great usefulness when wanted and an irritation if in the way when not wanted. The convenience of such a box can be appreciated only by those who in a hurry have been obliged to sift over the thousand pointed, scratching things which have accumulated in a common receptacle when in search for a single article of just the right kind.

TO CLEAN THE CELLAR

It is understood that no housecleaning is to be done before the furnace fire is out for the season. The first preliminary to

the cleaning of the upper part of the house is the sweeping of the coal-bin, dumping of the furnace, and carrying away all ashes. All registers should be closed before this is done, and the cellar should be sprinkled with water to lay the dust. Preserve closets should be looked over, the shelves scrubbed, and the preserves and pickles left from the winter set on one side, making room for the fresh jars which will be filled during the summer. All broken crocks and wornout pots and pans should be thrown away; the wood neatly piled and the vegetable cellar cleared of all accumulations. The walls and the interior of all closets should be well whitewashed, not only for the sanitary effect, but for the increase of light which the white surface gives.

The whitewash is especially needed in the vegetable cellar, to destroy the mould which will surely appear where there is vegetable life.

BUREAUS AND CLOSETS

After the cellar is freed from dust the first work is in the bureaus and closets of the occupied rooms. The bureaus should be emptied, the drawers taken out, and drawers and inside of the bureau thoroughly washed with suds and ammonia. When there are traces of moths the entire inner surface should be gone over with a paint brush dipped in turpentine.

The contents of the drawers are then sorted and replaced. The white paper is a great addition to the looks of the drawer, far superior to a silk sachet, which becomes untidy in a short time. It should be well fitted, with the edges turned in. When there is a fancy for delicate scent, by making the paper double, scattering the sachet powder between, and fastening the edges with paste, we have a sachet at once suitable and easily renewed.

The closets should be emptied, the clothing brushed, and when possible hung out to air. The walls should then be carefully brushed and washed with hot water, soap, and turpentine. The floor needs a special dose of turpentine to make sure of moth eggs in the cracks.

This is the time to consider the wardrobe. What is good should be kept, but all wornout finery should be disposed of at once, and such garments as are not required for our own needs given away to those whom they would benefit. The summer home is a place where the third-season tailor suit will come in play, if shortened and cleaned. The season's old gloves, if mended and furnished with buttons, serve admirably for gardening, flower picking, and rough rambling; old shoes can be resoled and heeled, saving the good pairs from destruction by the sharp rocks. But what can not be made to serve the owner's use should not be kept to take up valuable space in the closet. If given away at the right time things have an added value to the recipient. We have in mind a certain cloak which its owner felt too fine to give away, but which she could not wear herself. When it was disposed of three or four years afterward it was so out of style that it was really of no good to any one except as a protection from the weather.

THE ATTIC

The closets and bureaus all set to rights, there remains the attic. The garret of old times has disappeared. Some of our readers know as little of the attic and the cellar as of the garret, for the dweller in the apartment house is fortunately freed from all such responsibility.

The attic should be thoroughly cleared of all clothing, which, after a severe brushing, is hung on the line to air. Every box or trunk should be emptied and brushed out, the contents sorted and replaced. It is well to wipe out the trunks where clothing is kept with a rag soaked in turpentine. All old papers should be dusted, magazines and books sorted. A couple of shelves on the straight wall of the attic room are useful for things of this kind. Soap boxes fastened together with screws make excellent attic cupboards. When shielded by a curtain on a rod such a cupboard is not unsightly.

The attic is the refuge of the decrepit furniture of the family. Housecleaning season is the time for mending and

restoring this furniture to usefulness. Chairs weak in the back or legs need only a metal brace screwed on. Seatless chairs can be recaned. The kitchen chair which has lost its back can have it replaced. These are all matters of small expense, which are sometimes neglected during the busy season for want of time to attend to them. The old bureau discarded from the lower rooms is a boon in the attic, affording as it does a secure place for the pieces and various stores which must find their home out of the way of daily life.

The walls and ceiling of the attic should be brushed with a stiff broom. This is even more necessary when the roof is unfinished than when there is only a plastered surface for insects to lay their eggs on. The floor must be scrubbed well, also with plenty of turpentine or permanganate of potash in the water. All bits of carpet which are kept in the attic should be wiped with turpentine before they are returned to it—after being beaten in the yard.

The attic windows must be screened from top to bottom. A cool breezy attic makes a great difference in the heat of the rooms below. Attic windows should be washed as regularly as those of the rest of the house, and provided with white casement curtains. The looks of the outside of the house gain fifty per cent if this is done.

BELOW THE ATTIC

When the cleaning in its course comes to the bed and living rooms of the house, there is only the care of the winter curtains and the rugs and washing of the paint to be undertaken outside the regular work. The heavy curtains must be brushed in the open air, and folded away with mothballs, or put inside tar-paper bags. The handsome lace curtains are taken down, shaken, and washed. In the city this must be done out of the house as a rule. In the country it is possible to do it one's self. Rugs are well beaten and rolled up with camphor and mothballs, and wrapped in stiff paper and put away until fall. When a carpet must be lifted the floor is well washed with soap and water, with either permanganate

of potash or turpentine in the water, and allowed to dry thoroughly before the beaten carpet is replaced.

A house which is closed for the summer needs no summer curtains, but one which is occupied all the year round looks very bare in summer without any hangings. Plain white Swiss muslin curtains and portières add very much to the cool appearance of a house. The bare floors are improved, too, by the addition of a few matting rugs. Plush curtains as a rule are left on the poles and covered by holland bags. All handsome upholstered furniture should have slip covers of white or figured hollands, for the dust of the summer streets will sift in in spite of all care. The covers look cool and pleasant, as well as shield the fabric. All articles of silver and brass should be put away at housecleaning time, and only enough ornaments left around to keep the place from looking bare.

WINDOW WASHING

Window washing is an art by itself, and in the city bids fair to be handed over to specialists. There are few city houses where the staff of servants is such that the really necessary amount of window washing can be done without seriously disarranging some other work.

There are many ways of window washing. One invariable rule is, no soap and perfectly clean cloths. Ammonia may be used to remove all grease and finger-marks. That preparation called electro-silicon cleans glass admirably, but is not advised for use except with a strong caution as to the flying of the dust when it dries on the pane.

An old method, and a good one still, is to wash the window with a chamois skin wrung out of cold water, wiping the glass dry with the same skin. There will be so little moisture left on the glass that it will evaporate at once. There was also a custom in the old days of washing with a cloth and polishing with newspapers, which left no lint and were cheaper than cloths.

The most modern and the quickest way is with kerosene. It is done as follows: To a basin of water as hot as it can be

borne with the hand two tablespoons of kerosene are added. There must be provided plenty of cloths which are perfectly clean. A small cloth is wrung out of the kerosene and water until nearly dry, and rubbed over the inside and outside of the window. The second window is then washed in the same way. Then the first is wiped dry with a large cloth, then the second. It will take about five minutes for each window. If the glass dries completely before it is wiped with the dry cloth it must be wet again. Picture and mirror glasses may be washed in the same way. This makes very brilliant glass.

USEFUL HOUSECLEANING RECEIPTS

THE CARE OF WALL AND WALL PAPER

Wall paper which is brushed frequently with a soft brush as advised in this work will stay fresh much longer than if neglected.

Grease spots on wall paper are best treated with fuller's earth. This should be put on in a paste made with warm water and left to dry.

When the wall paper is torn the place should be covered over with bits of fresh paper cut to the pattern. If there is a hole in the plaster, that should be filled with plaster of paris before the paper is put on. Mouseholes can be stopped with plaster of paris. A piece of cotton batting well covered with red pepper should be put in before the hole is sealed with the plaster of paris. Some people put in a rag saturated with turpentine, or fill the space with bits of broken glass.

GREASE SPOTS

Grease spots may be removed from wood with fuller's earth. This is applied in a paste made with water and allowed to remain on the spot several hours. The place is then scrubbed with cold water. This operation may need to be repeated several times.

Grease spots on stone steps may be taken off if strong soda and water is poured boiling hot on the spot, and a paste of fuller's earth and water applied and left overnight. This may need to be done more than once.

Oil or grease spots may be taken from paper with a paste of fuller's earth applied in the usual manner. Another way is to wash the spot with ether, chloroform, or benzine, and dry by ironing, laying a piece of blotting paper both above and below the paper.

INK SPOTS IN WOOD

Ink may be removed from wood by the action of muriatic acid. The acid should be applied full strength and the spot well washed with a cloth afterward. When the spot is small and fresh a drop or two from the bottle of ongaline will remove it.

Ink may be removed from silver inkstands and trays by means of a paste of chloride of lime and water. This should be rubbed on, but not allowed to remain, and the silver well washed afterward.

Ink wells can be cleaned perfectly if small nails are shaken about in them with vinegar and water.

TO CLEAN GILT PICTURE FRAMES

To clean gilt picture frames, the fly specks must be taken off with soap and water applied very gently with the cloth wrapped round the finger, and the spot wiped with cold water and dried with a bit of chamois skin. To restore the surface which the soap will destroy, size must be put on over the spots. The size can be bought at the paint store, and must be boiled and strained. It is put on with a camel's-hair brush. There must be no rubbing.

Another way is to wipe the frames with a sponge wet with hot alcohol or turpentine and leave to dry.

Prevention is much better than cleaning when it comes to fly specks on gilt. All gilt should be covered in fly time if the house is not fully screened, and if care is taken to keep the flies outside the screens.

GLUE

Good glue should be of even color and show few waves or cloudy lines. It loses strength by being reheated, and has most tenacity when applied very hot. For large pieces it

should be put on when freshly boiled, and pressure applied to keep the two surfaces tightly together. The glue pot should be cleaned occasionally and a fresh supply started.

Waterproof glue is made by soaking ordinary glue until soft but not liquid, and then dissolving it in linseed oil over a slow fire until brought to the consistency of a jelly.

For the ordinary repairs of housekeeping nothing is better than Le Page's liquid glue, which comes in tubes and can be kept indefinitely without danger of hardening.

WHITEWASHES

The following receipt for whitewash is recommended for its wearing qualities. Whitewash needs something in the way of size to keep the lime from growing powdery on the wall. Size can be purchased if desired. In this receipt the rice flour and glue act as a size.

One-half bushel of freshly burned lime is slaked with boiling water, being kept covered during ebullition, to keep in the steam. It is then strained through a fine sieve and seven pounds of salt well dissolved in warm water are added. To it is then put three pounds of ground rice boiled to a thin paste and stirred in boiling hot, followed by the addition of half a pound of Spanish whiting and one pound of clean glue, the latter having been soaked and then melted in a kettle inside of another containing hot water. Five gallons of hot water are added to the whitewash and it is well stirred. The whitewash must stand a few days covered from dust and dirt. It should be applied quite hot. The kettle may stand on a portable stove while the mixture is being put on.

Another receipt advises adding half a pint of flour which has been made into a thin paste with boiling water to a pail of lime and water ready mixed in consistency to apply to the wall.

Whitewashed walls will not hold paper if simply pasted on. The whole surface must be washed with vinegar to kill the lime before the paper is applied.

When there is whitewashing on the horizon, it is well to

save any old pails and tin pans for the mixing. Painters and whitewashers are supposed to bring their own tools, but it has been our experience that they invariably need more utensils than they provide.

A little carbolic acid should be put in the paste for wall paper, to discourage insect life.

CARE OF FLOORS

Floors which are to be painted should be soaked with hot boiled linseed oil. The boards will not warp or split if this is done.

One should avoid cheap varnishes; they either fail to dry or peel up by use and washing. Two coats of good varnish, followed by a coat of wax, makes a good and permanent floor. If the wood is poor we should use paint instead of stain, two coats followed by two of varnish.

The latest practice is to apply two coats of shellac as a filler, letting each dry in thoroughly, and then the varnish.

FLOOR POLISHES

Two and a half pounds of paraffine dissolved in one gallon of oil of turpentine is an excellent floor polish. The paraffine should be broken into small pieces and put with the turpentine into a kettle, which should stand in another of boiling water. It needs only a gentle heat to dissolve it. This is especially recommended for oilcloth and linoleum.

Two parts of linseed oil, two parts of alcohol, one part of turpentine, with one ounce of spirits of ether added to a quart of the mixture, will make a polish equally good for furniture and floors. It is applied with a flannel cloth. It is rubbed into the furniture with a piece of chamois skin or thick felt, and on the floors with a polishing brush.

This is another receipt. Not quite half a pound of bees-wax is shaved fine and melted on the stove. To it is added one quart of turpentine, and the mixture is stirred in a kettle which stands inside another filled with boiling water. When well mixed, five cents' worth of ammonia is put in, and the mixture heated a little on the back of the stove, the kettle

still in its hot-water bath. It should not be removed from the hot water if the polish is to be used at once, for this is better applied warm. The mixture is rubbed on with a flannel cloth, and the surface then polished by rubbing with a piece of Brussels carpet.

RED STAIN FOR FLOORS

Potassium permanganate is much recommended as a stain for floors. It acts also as a disinfectant. A dark-brown reddish stain is made by dissolving one and a half ounces, costing fifteen cents, in a gallon of boiling water. It should be thoroughly stirred and put on with a painter's flat brush, working rapidly and with the grain of the wood. A small brush should be used in the corners. If not dark enough, another coat can be applied when the first is dry. The stain should then be set by three coats of linseed oil rubbed on with flannel and with the grain of the wood, each coat being thoroughly dried. Then a polish of beeswax and turpentine should be applied with a flannel and polished with a brush which is heavily weighted and has a long handle.

Prepared stains are as a rule satisfactory. If not dark enough a little lampblack will give depth and richness.

OILCLOTH AND LINOLEUM

Oilcloth should be varnished once in a while. Each varnishing adds materially to the life of the oilcloth.

To clean an oilcloth it should first be wiped in cold water and then in milk. So treated it will always be glossy and not slippery. Many people, in addition to the occasional varnishing, wax the oilcloth slightly.

Linoleum may be waxed exactly as a hardwood floor is and looks much the better for it, particularly the unpatterned linoleum.

VARNISHED FLOORS

Varnished floors should be washed frequently with hot water in which a little lard has been melted, in the proportion of a tablespoon to a pail of water.

SOME POINTS ON CLEANING PAINT

Colored paint needs as a rule only wiping with warm water in which has been put a little ammonia. The paint should not be left wet, and the water should be changed often.

White paint may be cleaned with whiting. The whiting is simply rubbed on dry. To remove pencil marks a bit of cut lemon is rubbed on before the whiting is used. For this purpose the whiting should be mixed with a little water.

Very much soiled paint should be washed with warm water and a mixture of fuller's earth and soft soap. This is put on with a cloth with a downward motion, and washed off at once. There should be a second person to dry the paint as soon as it is finished, or it will look streaked.

Dirty spots on paint may be removed with soda and water. This should be at once washed off with clear water and the place dried.

TO CLEAN MARBLE

Marble or tiled floors can be cleansed with sawdust slightly dampened.

Marble may be scoured with fine table salt. Most stains will yield to this treatment. For obstinate cases whiting, bluing, and soft soap should be mixed, brought to the boiling point, and spread on the marble. When dry it should be washed off with hot water to which a little citric acid has been added. The acid will roughen the skin if it touches it.

Bad stains can be taken out of marble by covering the spots with a thick layer of mortar made of unslacked lime and very strong lye. The mortar should remain on the spot six weeks, and then be carefully washed off, the places being rubbed hard with a brush and a strong lather of soap and water.

TO CLEAN FURNITURE

To clean furniture wash well with cold water—if deeply carved a brush must be used—and then wipe all moisture off with a chamois skin which has been wrung out of cold water. Dry chamois skin should never be put on furniture. The surface is then polished with a mixture of equal parts of

linseed oil and turpentine, which is rubbed on with a cloth and then rubbed dry. Very dirty furniture should be washed with a mixture of vinegar and water in equal parts before polishing.

FURNITURE POLISHES

To make a good furniture polish, take one quart of ninety-eight per cent alcohol, half an ounce of ground resin, and one and a half ounces of gum shellac. After the resin and shellac have cut in the alcohol, one pint of linseed oil is added and the mixture shaken. It is put on with a cloth and the wood is polished with a flannel.

This is especially recommended for mahogany. Equal parts of turpentine, linseed oil, alcohol, and vinegar are put together in a bottle. This is rubbed on with a bit of flannel and polished with a soft rag.

Scratches and the spots made by eau de cologne can be removed from varnish by the use of alcohol and turpentine. The alcohol is first rubbed on, then the turpentine.

MAHOGANY STAIN FOR WOODWORK

Eight ounces of dragon's blood dissolved in six pints of benzine makes a good mahogany stain for woodwork. It is applied with a brush.

TO CLEAN IVORY

Ivory ornaments should be well washed with soap and water, being gently scrubbed with a brush and then put in the sunshine to bleach. They should be wet two or three times a day with soapy water. It may be necessary to continue the process several days. When taken in they must be well washed again and dried with a soft cloth.

Ivory can be quickly bleached by immersing it in water in which a little chloride of lime has been dissolved.

TO CLEAN ENGRAVINGS

Soiled engravings may be cleaned with salt and bicarbonate of soda.

The engraving should be fastened with painter's pins on a board, and the salt and soda mixed in the proportion of one

part of soda to two of salt spread evenly over the surface. The whole surface should then be moistened with water and a little lemon-juice. The board is then tilted up on end and the paper liberally sluiced with boiling water poured on from the kettle. There must be no rubbing. If the engraving is not very dirty less soda can be used, as the soda tends to turn the engraving yellow. The paper must be allowed to dry gradually. Heat of any kind will make it yellow.

TO MEND BROKEN CHINA

Broken china can be mended with a paste of powdered lime and the white of an egg. It should be applied quickly to the broken edges, and these joined firmly together and left to dry.

POLISH FOR BRASSES AND SILVER

A polish for brass and copper is made with powdered and sifted rottenstone and soft soap, thinned with oil of turpentine until it is about as stiff as putty. The article is first well washed and then rubbed with the paste mixed with a little water, then polished with a piece of chamois and left perfectly dry.

Another polish is made with one ounce of oxalic acid, two ounces of rottenstone, one ounce of sweet oil, and turpentine enough to make a paste.

The great trick in cleaning brass is to leave it *clean*. It must be rubbed perfectly dry and left so that a bit of white cloth rubbed over it is not soiled. If any of the cleaning mixture is left on the metal it will turn black very quickly.

Very dirty brass should first be rubbed with chromic acid; *i. e.*, equal parts of bichromate of potassa, sulphuric acid, and water. It makes brass clean at once, but must be washed off immediately and either of the above polishes applied.

Benares brass may be cleaned with a bit of cut lemon. It must then be washed and dried.

A mixture of muriatic acid and alum dissolved in water will impart a golden color to brass if steeped in it for a *few* seconds.

Silver which has been blackened by exposure to sulphureted hydrogen may be cleaned by being rubbed with a boiling saturated solution of borax.

All prominent jewelers sell preparations for cleaning silver which are excellent. Whiting, wet in a paste with ammonia or alcohol, is a very good domestic cleaning agent. The silver should be washed in boiling water after being polished, and wiped with a perfectly dry cloth. All whiting must be removed from the depressions of the pattern with a brush. This brush should be washed and well dried after being used.

Silver is easily kept bright if it is boiled occasionally in an aluminum kettle. The kettle must be perfectly clean and bright and filled with hot water when the household silver is put in it. Keep the water boiling for fifteen minutes, then take out the silver and dry it with a towel. It will be found that the forks, spoons, etc., will be beautifully bright and glittering. The kettle will have become tarnished.

MATERIALS FOR APPLYING POLISHES

Flannel is always recommended for applying all cleaning mixtures to furniture, etc. This is because flannel is soft and the fibre will hold the paste or fluid well, and will not give to the surface any lint. For polishing floors there is nothing better than a piece of Brussels carpet tacked over a piece of wood. The polishing cloth for furniture should be very soft. Old silk handkerchiefs are the very best polishers known except the palm of the hand. We do not recommend to the homemaker the latter means of imparting a lustre, however.

PRECAUTIONS FOR THE HOMEMAKER

The homemaker should provide herself with rubber gloves and a rubber apron, and a pair of the loose chamois-skin gloves sold for the purpose of cleaning silver. The rubber gloves will shield her hands from all very dirty work. They must not be worn too long at a time, however, for they induce perspiration to such an extent that after they have been worn a little while the hands look quite shrunken. The rubber apron is to wear when washing dishes or doing fine washing.

The chamois-skin gloves should be on hand for all emergencies. They can be washed out after using, and will wear a long time if properly cared for. Being made in the most clumsy fashion, they do not bind the muscles of the hand in the least as these move in work.

When there is any particularly dirty work to be done, such as cleaning grates or polishing brasses, if the nails are filled with soap before the work is begun they will not suffer. It is sufficient to scratch the nails across the cake of toilet soap, taking care to work some into the skin at the base of the nail.

The following lotion is excellent for the hands if they have become roughened by work: Ten cents' worth of quince seed is put to soak in a pint of warm water overnight. In the morning the seeds are thoroughly beaten in the water and the liquid strained off. To it is then added three ounces of glycerine and one-half ounce of tincture of benzoin. This is also recommended for a shaving lotion.

Fruit stains may be taken from the hands by the fumes of sulphur, as elsewhere suggested, or by means of the juice of a ripe tomato. Soap must never be used on the hands if they are freshly stained with fruit. It will turn the skin quite black.

XXIII

CLOSING AND OPENING THE HOUSE

To Close a House for the Summer—To Open a City House in the Autumn—To Close a Country House—Insect Plagues—Disinfectants

TO CLOSE A HOUSE FOR THE SUMMER

WHEN a city house is shut up for the summer every article of furniture should have its unbleached cotton cover made to fit and marked in indelible ink with name of the room and of piece to which it belongs. Before these are drawn over, newspapers should be laid on all flat surfaces to keep the dust which sifts through from coming on the wood. All pictures in gilt frames should have their own particular covers as well. Brass bedsteads especially should be covered, and the mattresses and pillows wrapped in calico sheets. If these are made in the color of the room there is never any doubt as to where they belong.

No house can be shut up while the family still occupy it. There must always be one or two left behind to attend to the last matters. The shutting up really begins when the winter clothes and furs are put away, and much of the work of housecleaning is a preparation for the final closing. When the time comes it should be done a room at a time. Books left in the bookcases should have newspapers laid over the tops. The contents of bureau drawers should be protected by newspapers spread over them and coming down at the back and front. The covers are then drawn over the different articles of furniture, every ornament put away in the closet, the pitchers emptied, pictures covered, and the shades drawn down.

No solid silver should be left in the empty house. Part of the spring cleaning consists in polishing the silver and tying it up in bundles, ready to be packed into the box for the

storage. Each dozen should have its own strip of Canton flannel stitched into pockets. This is done by folding back the selvage toward the centre and running the machine across the folded part at regular distances. The pockets should be wide or narrow according to the fork or spoon which they are meant to fit.

Large pieces of plated ware should be covered with a paste of whiting wet in alcohol and wrapped in jeweler's tissue paper. Ordinary tissue paper turns silver black.

Brass should be polished and tied up in brown paper or cloth. Any good brass polish will do, but the article must be wiped very clean before it is tied up, or it will be worse than if it were left out.

Brass poles and rings should be wiped clean and put away in the closet, each set of rings tied to its own pole.

China, fortunately, needs no especial care during hot weather.

Candles should be put in a box where they can lie flat. All lamps should be emptied.

No flour or cereals should be left in the closets, nor food in the safe or refrigerator. The door of the refrigerator should be left open. Coffee and tea if put in tin boxes will not spoil, though they do lose a good deal of their flavor if kept too long before using.

The garbage pail should be rinsed and dried.

When a city house is closed there should always be two keys to the front door carried away. It is not safe to depend on one key.

The gas should be turned off, but not the water. It is well to have some one go in once in a while and flush the pipes and make sure that the traps have not dried out.

Before leaving the house all iron pots should have a coat of lard, as well as the range and stove. The flatirons, too, should never be forgotten, but be well covered with grease. It will not hurt, but rather improve them. They can be cleaned when the house is opened by washing in strong soap-suds and rinsing in hot soda water. If they are forgotten and

rust, a paste of sweet oil and powdered quicklime will take the rust off unless it has eaten too deep. This paste must be washed off after a few days with hot and strong soda water. The irons can then be polished with rottenstone and oil. This mixture is spread on a board and the iron rubbed backward and forward in it until smooth. The iron must then be well washed.

TO OPEN A CITY HOUSE IN THE AUTUMN

To open a city house in the autumn is the hardest housecleaning of the year. Every article in the house must be wiped, every wall brushed, every window washed, all pipes flushed. It is well to call in the aid of several cleaners or the work will drag endlessly and the first room done will be tracked and dirty before the last one is done.

After the windows are opened, the pipes flushed, and walls and floors brushed, all the covers should be taken off and sent out to be washed. When they come back they should be tied up in bundles, those belonging to each room by themselves, and put away for the season. All the furniture should be gone over with furniture polish and the brasses brightened. It is here that the benefit of the covers appears. The cost of making and washing is less than the value of the time consumed in trying to clean the wood when the furniture is not wrapped up. After the furniture is cleaned, the floor polished, and the windows washed, the rugs can be put down and the curtains put up. If the poles and rings have been put away together, there will be no difficulty in finding them. If not, there is a very worried morning for the homemaker.

Before the curtains and the portières are put up they should be looked over carefully for rips or tears and mended.

This is the time to see if the cord on the shades is in good order as well as the cords of the window weights. Soiled shades can be turned upside down when it will pay to do so. It will not as a rule, for the upper part is generally much soiled by the dust which comes through the window at night.

This is the time also to test every gas tip in the house and to put fresh mantels on the Welsbach burners.

There are numerous small expenses which come up when opening a house, and it is as well to be prepared. We must remember that one is not clean for nothing.

TO CLOSE A COUNTRY HOUSE

The object of closing the city house is to guard against dust and mould. In the country house, on the contrary, one tries to forestall all the work which must be done in the spring. There are very few localities where winter dust is a factor to be considered. A house set down in the midst of plowed fields which are not continuously covered with snow does certainly suffer during the winter winds, but there are very few of us who choose a summer residence in the midst of plowed fields. It is usually safe to clean the paint and polish the floors, leaving only the washing of the windows to the spring.

All rugs should be taken up, shaken, and folded ready to spread in the spring. All mattresses should be well brushed and wrapped in calico covers, and the metal of the beds shielded from damp by similar covers. All ornaments should be put away. The linen closet should be gone over, compared with the inventory, and locked up. It is well to leave out a couple of sheets and a few towels, ready for the first spring visitor, in the bureau of the room she is going to occupy.

Matches must be collected and put in a tin box.

Preserves and jellies should be covered with an old comfortable or blanket. It is not safe to leave ammonia in an unheated house over the winter; the corks are invariably forced out and in some instances the bottles explode. Olives in brine do not stand cold weather. They will be found with mould over the brine in the spring.

Flour and cereals may be left in tin boxes. Otherwise they spoil from dampness and become an encouragement to mice.

The mouse is the great danger in a closed country house.

Not only the ordinary house variety is to be discouraged; the field mouse, or shrew, will invade the dwelling and devour what she finds, and make her nest in the most inconvenient and unwelcome places. The very last thing the departing summer occupant should do before turning the key in the lock is to deposit bits of poisoned bread and butter in the attic, pantry, and cellar. It has never been our experience to find such bits of food disturbed in the spring, but when the ceremony was omitted the mice seemed to have held high carnival all over the house. The poison is a gentle hint which the large and small rodents appear to take to heart. When it has been distributed there have been no signs of the intruders.

Nearly all summer houses are provided with outside shutters which cover the entire window. These are put up after the family leave. When no such outer covering is furnished newspapers should be pinned over each window in the house and the shade rolled up. The paper will prevent the snow from sifting in and melting. Where there are no blinds it will save the shades and the contents of the room from the severe action of the winter sun. A piece of newspaper which has been in an unshuttered window after the winter's exposure will be of a real coffee brown.

It is a very good plan to do up the curtains in the autumn. The danger of lying in the starch over the winter is less than lying with the summer's dust in them for that period. The life of a muslin or scrim curtain is not very long at the best. Between sun and washing they seldom last over three years. The colored muslins are an aggravation only, fading often in one season beyond recognition. Whatever they are they are better off clean than dirty for the six or more months that the house is closed.

Every chimney-top should be covered. The cheerful and companionable swallows are a great pest to the country house-keeper. They come down the chimney in the spring, attracted by the light which shows in the fireplace, and die miserably endeavoring to escape through the window. We do not know which feeling is uppermost when the unfortunate little bird

is discovered—disgust at the condition of the room or pity for the uselessly sacrificed life.

One of the last duties of the housekeeper is to make a pilgrimage through the rooms to examine the condition of the bowls and pitchers. The washstand utensils should be wiped dry and turned upside down. It is not enough to wipe them. There is in the crockery enough moisture which has penetrated the glaze to spoil the set if left in the natural position. It will settle gradually to the bottom, and there freeze, leaving a little crack in thawing all round the bottom, and a leaky pitcher or slop jar is the result. Pitcher, mug, and small pitcher should be turned upside down in the bowl, and the other articles on the floor. The bowl does not seem to hold the water long enough at a time for it to penetrate the glaze. It is well to treat the last tea and coffee cups used in the same way, as well as the pitchers used for water during the summer.

Where there is modern plumbing all pipes must be emptied. The boiler should not be neglected. It will not empty through the other pipes, but must have a faucet beneath through which to allow the water to escape. The traps should be pumped out and filled with kerosene oil. If other oil is used, when it is let down in the spring there should be a thorough scalding with liquid lye immediately after to prevent the pipes from forming a skin of grease.

Where the winter is very cold all cut glass left in the country house should be wrapped up. The severe cold sometimes cracks it. This is a precaution to be observed for pressed glass as well.

All lamps should be emptied.

INSECT PLAGUES

BEDBUGS

It is no reflection on a housekeeper to find her house suddenly overrun by bedbugs, since we are at the mercy of our neighbors, and one of these most prolific pests will soon populate an apartment. She is to blame, however, if she continues to have these unpleasant visitors. They can be driven

out with care and vigilance,—first, last, and always vigilance. Every crack and crevice must be filled with corrosive sublimate laid in with a feather, or a mixture of kerosene, turpentine, and corrosive sublimate. The picture molding should be taken down and well painted on the under side with this mixture, and the cracks under the baseboard filled with paper saturated in it, thrust in with a screwdriver. Every part of the bed and bedstead should be gone over, the tufts receiving especial attention.

Another mixture advised is, alcohol one pint, crude ammonia one ounce, corrosive sublimate one ounce, camphor one ounce. This is not to be applied at night, on account of the danger of fires.

The inside of all bureaus and washstands in the infested room should be washed with a solution of permanganate of potash in hot water, in the proportion of one quarter of an ounce in a quart of hot water. This is sure death to the eggs, and when the room is carpeted it can be put on the floor before putting the carpet down. It should not be used on a bare floor unless applied all over it, since it makes a dark-red stain. When a room is found to be overrun with the bedbugs the carpet should at once be lifted and shaken, and the floor washed. If this is not possible, then it should be covered with wet cloths which are dried with very hot irons. The steam will kill the bugs and incidentally all moth eggs at the same time.

One cleaning will not suffice. The room must be examined again and again. If the bugs seem to be under the paper, there is no escape from a thorough overhauling of the place. The paper must be scraped off, the walls washed with permanganate of potash, and all woodwork gone over thoroughly with a large brush filled with turpentine. The liquid should be forced into all cracks. The carpet must be banished and the floor must be washed with corrosive sublimate or permanganate, the cracks filled, and then stained, oiled, and waxed. All woodwork should be painted and a little carbolic acid mixed in the paste for the paper.

People who live in apartment houses are very apt to suffer

from the carelessness of the neighbors. They should close as effectually as possible every crack, especially in the plastering.

When it is desired to drive the bugs from the beds only, as in the case of travelers stopping in infested rooms, a plentiful application of lavender water or camphor to the bed linen and mattress will ensure peace.

When the presence of these insects is suspected, they should be looked for in the bed an hour or so after one has retired and extinguished the light, or very early in the morning. Those which we find later are only the ones too gorged to be able to return to their cracks.

MOTHS

Really thorough housekeeping will discourage moths to a great extent. They thrive in the dark and like repose and warmth. If frequently disturbed they do very little damage. When the closets are cleaned every bit of the wall and floor should be gone over and in the rooms no inch of wall paper should be omitted. Moths are extremely partial to dust. In the carded dust which one finds behind large pieces of furniture will be found dozens of the empty cocoons. For this reason all large pieces of furniture should be on casters, so that the moving is not limited to the two half-yearly house-cleanings.

When these insects have multiplied in the house there is no better way to kill them than to fumigate with sulphur. All silver articles must be carried out of the room, all gilt frames well covered or removed, and all cracks in the doors pasted over with paper. Sulphur prepared for this purpose comes in the shape of a candle standing in its own candlestick. This is put on the bottom of a small pan placed upside down in a larger one half filled with water. The wick is lighted and the door of the room closed, and the cracks filled with cotton. It is well to leave the room unvisited for a day or two. All clothing left in the room should be covered with old sheets, for the fumes sometimes fade light colors if they come in

direct contact with the material. All insects and all eggs will be disposed of by one fumigation. If the resources of the town do not afford a sulphur candle, powdered sulphur can be put on a saucer and a little alcohol poured over it. It will ignite without trouble if this is done; once lighted it burns of itself.

The fumes of vinegar on a red hot shovel are also recommended for destroying moths.

Winter clothing should be put away as early as possible before the old eggs hatch and the moths fly. It should be remembered that moths always attack dirty spots first. No woolen goods should be put away before being cleaned. Men's clothing especially, and tailor-made dresses, should always be sent to the tailor to be cleaned and pressed. Other articles should be brushed and the spots removed. They should be aired and then smoothly folded. If there have been no signs of moths they may then be done up in newspapers pasted together so that there is no crevice through which the industrious moth can creep. The printer's ink is extremely objectionable to the moth. A large chest wiped out with turpentine is used for blankets and bulky articles. Cotton batting saturated with turpentine is laid over the top and the edge of the cover pasted over with paper. Furs are put away with chloroform. This is poured on cotton laid round the furs. A quantity is left in a wide-mouthed bottle with the cork out and standing on the bottom of the box in which the furs are laid.

Furs should be well whipped when put away. Very expensive furs should not be kept at home, but sent to a cold storage. It is a penny wise and pound foolish policy to try to save money by caring for them one's self. One moth may ruin them irremediably. Some housekeepers trust to constant care for woolen goods, and do not put them away, but brush them regularly once a week.

Tar paper bags may be used for large pieces. Moth-balls should be put under the slip covers of upholstered furniture, if the house is closed for the summer, and camphor or moth-balls in the piano. The tone is sometimes much in-

jured by the destruction of the felt on the hammers by these pests.

Cedar oil is recommended as a safeguard. It is put on cotton and laid under the paper of the bureau drawer. The following English receipt is to be used as filling for sachet bags. It is said to be an effectual preventive and has the merit of an agreeable odor, which can hardly be said for the moth-ball and tar-bag: Take equal parts of orris root, cloves, cinnamon, caraway seed, lavender flower, and tonga bean.

ANTS

The country house is often besieged with ants. These are in one way the least objectionable of our insect invaders. They are clean and leave no traces, and carry off their spoil to be stored for winter. The unfortunates who find a sweet death in the syrup jug and sugar barrel are the only ones who are at all offensive by remaining with us.

They are extremely persistent creatures, but they may become discouraged, with care. Frequent cleanings of the pantry and store closet and scrupulous neatness as to floors will interfere with them a good deal. The best precaution against their inroads is the use of alkalis. When ants infest it, the shelves of the store closet should be covered with paper and the board underneath thickly strewn with borax. Sugar barrel and cake box should stand on pieces of soap, and free from shelf or wall. In the South, where ants of all kinds are to be found, the tables and safes stand in cans of water. No fruit of any kind should be carried into the storeroom. We have noticed that year after year the borax and soap would keep the ants away after the spring cleaning until peach time. The baskets of peaches set in the storeroom never failed to draw in swarms. Fruit belongs in the vegetable cellar or safe and not in the storeroom.

Camphor is recommended for driving away ants. It may not be used in a storeroom in which food is kept, for the food will absorb the odor; but if put in infested bureau drawers or linen closets it answers the purpose admirably.

FLIES

The modern dweller in the country can not imagine what the burden of fly time was in the old days before screens and poisons. The whole of the house was kept dark during the greater part of the day, and every article of food was covered perforce except when it was being eaten. No bright article could be left uncovered. All gilt objects, like picture frames and chandeliers and mirrors, disappeared behind tarlatan shrouds early in the season. We remember the sound of the disturbed flies in the butler's pantry at night as that of a swarm of angry bees.

Now there is no house so poor that it can not afford a screen door and sliding window screen. Life is not only possible but comfortable. Morning slumbers are no longer disturbed, and flung back blinds and raised shades make a cheerful period of what was formerly a most dismal time of the year.

There is still care needed. All openings must be screened, especially those of the attic and cellar. It is not possible to keep flies entirely out of the kitchen, but they may be killed there. Poison fly-paper should not be used, but the sticky kind will dispose of a great many and the faithful use of the fly broom of others. An energetic housekeeper once surrounded the space occupied by the garbage pail and ash barrel with sheets of sticky fly-paper, and put up shelves on which stood saucers of the fly poison. There was a perceptible diminution of the swarm which hovered round the kitchen door waiting to slip in on opportunity.

A small shelf on a tree near the piazza with its poison saucer will draw away the flies from the porch. The poor dead things are extremely unpleasant to look at, but constant sweeping will dispose of them.

When there are no screens flies can be driven out of a room temporarily if all windows are closed but one, and that raised only a few inches from the sill. The blinds must be closed except on one side of that window. On the sill should be a saucer of fly poison made aromatic with sugar and vinegar. The room will empty thoroughly in an hour.

The worst part of fly time is late August and September. All precautions should be redoubled then unless a large spring crop is desired for next year.

It may not be generally known that flies breed chiefly in barn manure. The new farming is a great help to nice housekeeping. In the old days, when manure lay round in heaps anywhere in the barnyard, the swarms of flies numbered myriads. Now that all of the droppings are carried at once to the asphalt-paved shed and the liquid stored in an underground cistern, and both kept closed from the outer air, matters are very different. The threat of the indignant housekeeper to carry the war into the barn and stable has been carried out also. We no longer depend upon sheaves of straw to serve as fly holders. The modern barn has its own screen doors, as has also the stable, and the flies are kept out as a matter of course as much from the horses and cows as from the house.

WATER BUGS

Only very frequent cleaning and constant inspection avails with the ubiquitous water bug. No spot in the kitchen or closets should be left uncleaned from month to month. The poison called Roach Sault, if scattered after each cleaning, will help greatly to keep the bugs away. Nothing will avail, however, if the sink is allowed to become foul and greasy. This must be scrubbed frequently with hot soda and water, and the pipes underneath and floor around it well washed in the same. Every pot and pan must be examined at the monthly cleaning. Most nauseous anecdotes can be related of spice mills taken down to use when one is in a hurry, only to find the drawer packed with croton bugs, and greasy pots half full of the disgusting, uncanny objects pulled out from the cupboard when one was changing cooks.

When Roach Sault is not obtainable, a mixture of red lead, flour, and sugar in equal quantities may be used instead. This is the English receipt, and when mixed in a paste and rolled out it is the beetle wafer sold in all parts of England.

MOSQUITOES

Pennyroyal, either the plant or its extract, will drive away mosquitoes. No insects really like it, and it may be used, when its odor is not objectionable, to discourage any of them. If rain water is stored in hogsheads for the garden, there must be a thin stratum of kerosene on top. The larvæ are extremely partial to rain water as a breeding ground.

DISINFECTANTS

The very best disinfectant of all is damp heat. Boiling water will destroy all germs in clothing or in any object which can be immersed in it for a little while. Steam may also be used for the purpose when it can be applied. Articles may also be put in the oven for a little while if necessary.

The various forms of chemical disinfectants which are advised for use in the house have all the object of destroying germ life, but some of them are valuable for other qualities as well.

Benzine, turpentine, chloroform, corrosive sublimate, copperas, chloride of lime, permanganate of potash, caustic potash, washing soda, carbolic acid, are all germicides. But the value of caustic potash and washing soda as used in pipes has to do with the chemical action which takes place when they are brought in contact with grease. This chemical action results in a soluble soap, which may be carried off with flushings of hot water. Benzine and the forms of coal oil, as well as turpentine, chloroform, and ether, all dissolve grease, but do not transform it, and in every case their cost would be a serious bar to their use for such purpose. All forms of lime when put with grease make an insoluble soap, and should not be employed for the disinfection of pipes.

Therefore we pour down the pipes hot soda and water or potash and water to remove the grease. We pour solutions of permanganate, or copperas, or chloride of lime into the closets or housemaid's sinks to destroy the germs which may have found a breeding place there and in the pipes. We use benzine, kerosene, turpentine, and all the members of that group

to destroy not only germ but insect life. This latter group do not affect the fibre or the color of either wood or fabric. The caustic disinfectants affect both.

All disinfectants are to be kept carefully out of the way of children and animals and from contact with the hands.

Washing soda should be dissolved in boiling water, three gallons of water to one pint of the soda.

Caustic potash, which is to be used if there is a stoppage in the pipes from grease, should be dissolved in a pitcher. Two quarts of cold water are added to a pound box of potash and stirred until the crystals are nearly dissolved. It is used at this strength and followed in an hour or so with copious flushings of hot water.

Carbolic acid is used in a five per cent solution. This is made by adding three gallons of hot water to ten ounces of crystals. This solution is strong enough for pipes, but for disinfecting the bowl of the closet and its trap a little of the strong carbolic acid procured at the druggist's should be poured in, followed by about two quarts of the five per cent solution.

Permanganate of potash is dissolved in the proportion of half a pound to four gallons of water.

Copperas is dissolved in the proportion of three pounds to two gallons of water. A few crystals of both the permanganate of potash and copperas may be dropped into the bowls and closets at any time. They will gradually dissolve.

PART IV.—HOME ETIQUETTE

XXIV

THE NATURE AND NECESSITY OF ETIQUETTE

A Factor in Domestic Economy—The Foundations of Good Taste—The Logic of Etiquette—The Ethics of Etiquette—Repose, the Ideal of Etiquette—Home Training in Etiquette—Children at Table—Rules in Eating—Leaving the Table—Conversation at Table

A FACTOR IN DOMESTIC ECONOMY

ECONOMY is a hard-worked word. We have already drawn attention to the fact that even in its narrow usage it means something more than mere saving. In its broadest sense it embraces the entire workings of the family or community to which it is applied and takes into account that interplay of all the departments and influences which goes to make up the whole. But the effect of the family upon the economy of the community depends upon the perfection of the domestic economy. And what is after all the most important factor in the economy of a household? Is it not the relations of the different members to each other, and their effect upon each other? No household is well ordered, no matter how spotless the neatness maintained, no matter how punctual the meals, no matter how small the expenditure in proportion to the results, the members of which are not giving and receiving the best possible from each other in the course of the daily life.

But to give one's best, and to receive the best as well, infers a certain training in small things. Devotion and love are not all which are required for happiness in a family. A great deal depends upon how this love is manifested, upon manner and manners. "A difference in taste in jokes," says George Eliot, "is a great strain on the affections." Had she

said a difference of taste only, there would have been a broader truth asserted. It is, however, when there exists a difference of opinion as to what constitutes good taste in behavior, that the strain is most perceptible.

THE FOUNDATIONS OF GOOD TASTE

Good taste in behavior constitutes good breeding. It is a matter of training of the heart. It is the essence of true Christianity—concern for the rights and feelings of others whom we meet—altruism in its most delicate form, because carried into the smallest things and most intimate relations. Good breeding is instinctive in all right-minded persons, and its practice is second nature to all refined people. Such are rightly called refined, for the alloy of self in their actions is removed.

Just how to express refinement of feeling is the business of what is known as "etiquette." This is the small change of society, its circulating medium without which the possessor of untold ingots would find himself much at a loss. It is said that a well-bred person need never feel embarrassed; but genuine worth proceeds much more happily on its way if it commands the tokens current in the social life about it.

THE LOGIC OF ETIQUETTE

There is no rule of etiquette which has not its reason for existence; and not one which is not intended to make life more orderly and comfortable. When we know just what to do and when to do it, and when we are sure to do it without thought, how free we are to give our best attention to the best things of life! It is possible for perfect breeding to allow its possessor to feel shy in a new environment the laws of which are not understood, for good breeding hesitates to interfere with what others hold as fitting; but good breeding is never awkward.

There are worthy people who scorn the claims of etiquette, feeling themselves above it. There are others who from a mistaken sense of loyalty to the past refuse to learn the new ways which new times have made necessary and expedient; what is

good enough for their father and mother is good enough for them. They are illogical. Should they carry out this idea to its limit, they would be riding in postchaises and using tallow candles. Every discovery, every improvement has changed the relation of man to man, and with each has grown up a new code of etiquette. Old books of social science make very entertaining reading to a thoughtful person. The contrasts of thought and life consequent upon the difference in ancient and modern resources and appliances are truly remarkable. The civilities of the Middle Ages, which correspond to our book of etiquette, forbid a man, in putting his hand into the common dish of meat, to seek for a favorite piece. What a tremendous change is demonstrated, when the treatises on manners of the early part of the nineteenth century ignore this possibility! The latter lay stress on the exact way proper for a man to introduce food into his mouth with his knife. That was in the day of two-tined forks. Now that the broad four-tined fork is to be found everywhere in use, does any writer on manners even speak of eating with the knife? Nowadays, each change of life changes its rules. There is a code of etiquette to govern one's bearing in hotels, in elevators, in subway cars. It is within the last year or two that women's long, flowing sleeves have brought the soup-spoon round to the side of the plate, in table laying, instead of in front, as in the old style. Such growth and change in good usage should never be ignored.

THE ETHICS OF ETIQUETTE

Good breeding requires, as we have said, the practice of altruism. Etiquette demands that the physical self be kept in the background as much as possible. The assertion of the ego in speech is ill-bred, but its repression is a matter of nice feeling. To cater to the natural man in public is a social sin, since there are social laws broken in the act. No physical need should be brought forward. To yawn, to lounge, in short to show that the mind is on one's self, and the physical self at that, is ill-bred. What an earlier age called "the poor

perishing body" is not to be brought forward. Tardy attention to ears or finger-nails in our presence, showing that their owner has neglected to prepare himself for our society in the privacy of his dressing-room, is an insult. Some one has said that the nose had no place in society.

Not only the care of the person is tabooed in public, but also all tricks of manner which usurp the attention of the onlooker to the detriment of the more pleasing and impersonal. Drumming, twisting locks of hair with the fingers, biting the nails, restlessness of feet and hands are all errors of the natural man, and should be avoided by the mature and corrected in the young. They denote, as a rule, some physical distress, but are so far removed from the actual seat of pain as not to call attention to the afflicted member. Such mannerisms may also indicate embarrassment; the offender has not learned to keep his mind from himself in the presence of others, and probably is distressed by lack of knowledge of the proper thing to do in the circumstances.

REPOSE, THE IDEAL OF ETIQUETTE

Absence of all tricks, absence of all self-assertion—this is repose of manner. And repose is the greatest advantage possible to its possessor. It does not antagonize. Our real gift to society is not obscured. "If only she did not wag her foot," was said of a very amiable and well-informed woman, "what a pleasure it would be to hear her talk!" Worth may be obscured and, to small minds, forced entirely out of sight by the neglect of that habitual practice of self-abnegation which constitutes good breeding and dictates our forms of etiquette. A lecturer on history, very famous in his day, once nullified entirely the benefit of his lectures in a fashionable young ladies' school by eating with his knife when dining with his pupils.

HOME TRAINING IN ETIQUETTE

Thus society rightly condemns all such short cuts to ease; and holds the delinquent for uncultured, that is to say, un-

tangle. But if untaught, whose is the responsibility? Not his, but hers whose province it is to teach him what he needs to prepare him for the world, and that part of the world which is the home. It is again the homemaker to whom the burden comes. It is she who must so train her charges that they may acquit themselves with credit when with strangers, must make the amenities of life such second nature that even in the close association of the family they do not fall short. She can not begin with her charges too young, nor be too attentive in impressing these small things when the mind is open to new ideas.

She will spare no pains to keep abreast with the times, and to make herself acquainted with all changes and improvements in the art of living. This might once have been difficult for one who did not mingle often with the social world, but nowadays the magazines devoted to the home are filled with helpful hints, and report all innovations as they are introduced.

Beyond the immediate members of her own family there are others to whom the homemaker owes a direct duty in these matters, notably the future wife of her son, or husband of her daughter; much more to the former than to the latter. Women have very little false pride about learning new and better ways, while it is difficult for a man whose observation has not been trained in such matters to know when he is at fault, and still more difficult for him to change his manners when he knows it. His pride interferes. We may reflect that these are the little things of life, and should not be allowed to weigh in matters of affection nor to prejudice us against real worth. We may indeed pardon a good deal to real worth at a distance and in theory. It is not so easy when the offender is near by. Theoretically, a cinder is a very small thing, but not when in one's eye. To sup one's soup is no moral turpitude; but a wife hates to be obliged to remind herself daily at dinner, when her husband sups loudly or overloads his fork, that he is an extremely honorable man and that she loves him. Nor is it possible that she has thought

so far without thinking also that his mother should have taught him better. Disgust is an emotion easy to excite and difficult to conquer. It is an appalling tribute to the power of small things when we realize that a well-bred villain may be a pleasanter companion than many a good man.

There should be no such thing as "company manners." No observance of etiquette should be omitted when in one's own household. *Savoir faire* should be taught as conscientiously as geography or literature. Perhaps more so. One's neighbor's intimacy with the far countries of the world, or his admiration for Browning, does not concern us as deeply as his demeanor when in our company.

Our tri-daily tryst at table is the severest test of our training. Seated opposite to each other, without means of escape, for a period of time varying from half an hour to two hours, according to the formality of the meal, we learn to appreciate that unobtrusive bearing which modern society demands, and the correctness of the rules it lays down. We may easily learn not to interrupt, not to contradict, not to precede our elders through a door, to offer them the best chairs, to take the back seat at the theatre and the front seat in the carriage, to keep the self out of sight, in all actions of daily life, for they are conscious actions which have to do with other people. But consideration of others when attending strictly to our own personal wants is more difficult to accomplish. In most cases the offence is of no benefit to the offender. Noisy eating, chewing with the mouth open, pouring liquids down the throat as down a pipe, are indulgences conferring no additional pleasure on the eater, but seriously marring the comfort of his neighbors.

We may dispense with ceremony in the matter of serving in the privacy of our home life—may reduce our viands to their simplest form; but there should be no relaxing of our table manners. It is much easier to eat the right way than the wrong when once we know how. And how necessary is the early training in the right way, if the homemaker is to save her children from burning scarlet mortification in later life.

It is a tax on her at the time, but it is the due of the young that she should not let small things slip by her unnoticed because it is the easier way. If she does, there comes a day when the remissness of the parent is keenly felt by the child. What were the feelings of the well-grown daughter of fashionable parents when, at her first meal at a finishing school, she was rebuked for buttering an entire slice of bread and eating it out in scallops?

"One can not be always picking at the children," is often heard. There should be no need of picking if the habit of obedience is early formed. The mother has herself to blame if her children are uncomfortable companions at table and elsewhere.

CHILDREN AT TABLE

No child should be allowed to come to the table until it can eat nicely and quietly, and has learned to sit still for a reasonable length of time. Children are not in their proper place at late dinner. The meal is too heavy for them and the hour unsuitable. At the other meals, when the child is old enough and has been sufficiently well instructed to carry himself with dignity and propriety, the table becomes to him a source of education. It is there only that the American child sees its parents for any consecutive length of time, and there he hears them talk to each other of matters interesting to themselves. Were we to separate from our memories of early impressions those received at the table the relatively great number would be a surprise to us all. The effect on the vocabulary of the youthful listener, losing no opportunity to acquire expressions for his ever-increasing brood of thoughts, is especially marked. "What!" said a little girl of five to the writer, a guest at her mother's table, "do you know all those words?"

RULES IN EATING

We itemize a few of the small things which should be learned early by every child and observed by every grown person:

Soup is to be taken without noise from the side of the spoon opposite to that which is dipped in the liquid. The spoon should never be filled to the brim, and should be raised slowly to the lips.

The teaspoon has become merely a stirrer. One may test the temperature or flavor of the beverage with the spoon, but it should not be used to convey more than a mere taste to the mouth. The liquid should never be poured into the mouth from the end of the spoon, but sipped from the side.

Unless the table is set with a silver knife for the fish, a fork only is used. The English always provide a knife, as they dislike chasing a morsel around the plate with a bit of bread. For a similar reason they always serve both spoon and fork with pies and puddings, while the American custom is to be guided by the consistency of the viand.

The fork only is used for entrées and vegetables. The fork alone should be used for salads, but this premises very tender lettuce and other leaves, which may be cut with the side of the fork and folded into small mouthfuls. Tough lettuce and escarole should appear on the table only as substitutes for spinach.

It is the worst possible taste to scrutinize each leaf carefully before eating. When doubtful if one is not partaking involuntarily of animal as well as vegetable food, good manners demand that the salad should either be eaten with the eyes elsewhere than on the plate, or declined.

Meats, poultry, and game require the use of both knife and fork. The flesh is cut off in small portions and one eaten before another is cut. It is never allowable to take up a bone with the fingers, in public or private. Children, especially, should not be permitted to do so. There is a messiness and greasiness about the action revolting to the observer.

There is a good deal to be taught in the mere holding of the utensils. The knife and fork should be held easily and lightly, never clubbed in the hand. When the fork is on its

way to the mouth the knife should be allowed to rest on the plate, with the muscles of the right hand relaxed. The fork, if used alone, is held in the right hand, and the tines may be turned either up or down. It should never be held in the left hand with the tines turned upward.

It is seldom, nowadays, that a plate is passed at table for a second helping; but when it is so passed, the knife and fork should lie side by side on the plate, not to be removed and laid on the bread-and-butter plate or on a piece of bread. Also when the knife is not in use it should lie on the plate, not rest with the handle on the table and the point on the edge of the plate or on a bit of bread. Knife and fork at the end of a course are placed side by side on the plate. In cutting meat as well as when conveying food to the mouth, let the arms be held close to the side.

Never cut your pie with a knife.

Lift a wineglass by the stem, hold it between the thumb and two fingers near the bottom of the glass. It is the thumb and first two fingers which are used also to hold the tumbler. Raise the latter with the thumb and fingers, lightly grasping the glass near the bottom, the rest of the hand being below the glass. To hold a glass, goblet, or tumbler near the top with the first finger elevated above the rim or curved inward is extremely ungraceful.

The eating of bread and butter is a fine test of one's training. Bread should be broken from the slice in small pieces, and one piece buttered and eaten before the next is broken. Bread may be used as a pusher, but should not be employed to soak up the gravy on the plate. It is never to be broken into soup.

Olives are eaten from the fingers. So are bonbons, salted almonds, and celery. One helps one's self to celery with the fingers, but to olives, etc., with the fork or spoon provided. Dry cakes are eaten from the fingers, but with soft, sticky varieties a fork should be given.

Asparagus may be eaten from the fingers when the soft part at the top has been cut off with the fork, but it is not a

graceful action. The asparagus tongs lately introduced are a neat solution of what has always been a difficulty.

Pears and peaches may be peeled, cut into pieces, and eaten from the fingers. Fruit seeds and small fruit stones are removed from the mouth concealed between the thumb and forefinger. Many persons use a spoon for this purpose, but it is not as unobtrusive a method of conveying the seeds to the plate. Large fruit stones should not be put in the mouth at all. Hard-fleshed grapes are cut on the plate and the seeds removed before they are raised to the lips. An orange may be peeled, the segments separated, cut in two and the seeds removed, or it may be cut unpeeled into small sections, the peel turned back from the ends and the flesh eaten from the skin when raised by one hand to the mouth. It may be cut in halves in a cross section and the juice taken out with a small spoon, but not sprayed into one's neighbor's face.

Salt and pepper have their own rules. At a ceremonious dinner they are seldom used. The food is assumed to be served with exactly the proper amount of seasoning. The individual salt-cellars of the present day are, as a rule, accompanied by tiny spoons. If there are not such spoons a portion of salt may be taken by the clean point of the knife to the plate. The tines of the fork are used to convey it to the food. Celery may not be dipped in the individual salt-cellar. The salt should be on the plate.

Pepper is shaken from the pepper-box on the plate, not on the food. One does not tap the bottom of the box with the other hand.

Cheese is placed in small bits on biscuit or cracker with the knife and eaten with the biscuit, not from it.

One should always eat daintily and slowly, the food being introduced into the mouth in small quantities. Very small mouthfuls are required at all ceremonious meals, otherwise the eater may be seriously embarrassed if suddenly addressed. All comment upon the food is out of place at ceremonious meals, even when with intimate friends.

Too gluttonous enjoyment of one's food is in bad taste at any meal.

LEAVING THE TABLE

At ceremonious meals the signal for retiring is given by the hostess. The napkins are laid on the table quietly, not folded; the ladies pass out, the men stand until they have gone, the man nearest the exit opening the door or holding back the portière, as the case may be.

In the family life it is only polite for each person at the table to wait until the meal is over, unless specially excused. This is the case at late dinner. Breakfast permits of coming and going, and luncheon is either a formal function or is absolutely informal, according to the taste of the family. When there are guests at either meal, it is only decorous for the family to remain to its close.

CONVERSATION AT TABLE

One very important item for table etiquette is the modulation of the voice. Another is a proper regard for the rights of others in conversation. One should not usurp the conversation, nor endeavor to secure attention by raising the voice. If one really desires to be heard, a remark made in a low tone with distinct enunciation carries further than if the voice is raised. The great mistake made by those who would do their part in society is the attempt to shine, where they would contribute more in the rôle of appreciative audience. It is necessary to have something to say, however, if the burden of the table talk is to fall to one's share; and the topic should be of impersonal interest. A very much admired social leader of the past generation made it a rule never to go anywhere without being prepared for the people she would meet through a knowledge of their tastes and professions. Another once laid it down as an axiom that the duty of each member of society was to be ready with some topic to be introduced if conversation slackened or became too personal.

At a ceremonious dinner the guests are oblivious of the servants. They take what is put before them without question or remark, and manifest no wants whatever. In the family, it is good form to allow direction when necessary to be given by the one at the head of the table. One says to one's hostess, or a child says to its mother, "May I have a glass of water?" but does not give the order.

XXV

HOSTESS AND GUEST

The Educational Value of Hospitality—Obligations of the Hostess—Care of the Guest Room—The Invitation—Entertainment for the Guest—Duties of the Guest

SAID Emerson, "The chief ornament of a house is the friends who frequent it." No house is complete without its guest room or rooms, no home perfect without its occasional guests. Hospitality is at once a pleasure and a duty to ourselves. We need the fresh line of thought which the guest brings with him. There is also something elevating in thrusting our cares and worries into the background while our friends are with us. Things appear in a new perspective afterward and worries often seem of relatively smaller importance.

THE EDUCATIONAL VALUE OF HOSPITALITY

The exchange of visits has something educational in it as well. We learn from our friends not only in what they do, but in what they do not do. This education is necessary for the young. The training of being on one's guard not to transgress the boundaries of good taste when assuming the rôle of guest is as salutary as is the care and responsibility which falls to the share of the hostess. For children in particular the discipline of "the stranger within the gates" is something which can not be otherwise given. Have we not all seen the misery of the only child when confronted with the necessity of yielding playthings and attention to the young visitor? But painful as the lesson may be, the younger it is learned the better. Bitter, too, is the experience of the child who sees the young guest doing unrebuked the things forbidden to himself. What a benefit it is to him to learn that the injustice

is apparent, not real—that he should obey his parents' wishes regardless of the actions of others!

OBLIGATIONS OF THE HOSTESS

In caring for a guest it should always be borne in mind that no one is invited to the house except for a reason. The invitation is given either for the pleasure the society of the guest affords us, as a return for accepted attentions, or because we desire by means of our hospitality to benefit our guests. In any case the hosts have assumed certain duties. It is not enough to provide board and lodging merely. It is not hospitality to greet our guest with, "I do not mean to make company of you." It is a selfish shirking of obligations. To our mind a guest is and must be company. There is necessary a certain amount of formality, and he or she can expect a certain amount of attention and entertainment. As far as the house and its comforts are concerned, the guest should be considered as at home, but that careful putting of others before ourselves which is the essence of good breeding comes especially in play in our bearing toward our guest. If we are not willing to give the proper amount of care and thought to our friends why do we invite them to our houses?

The visitor in America is usually of the gentler sex, except in summer at house parties and the week-end visits of business men. This is for much the same reason that the greater part of the entertaining of society now takes place in the afternoon. It is not that our men are unsocial, but that they are too busy.

CARE OF THE GUEST ROOM

The visitor may remain for a couple of days, for a week or a month, or may be merely a friend who unexpectedly claims the shelter of the house for the night. As a guest she or he can claim certain things. One is an unshared room, which is clean, well ordered, furnished with comfort and freshly prepared for the new arrival. In some houses it is customary to keep the beds in the guest rooms always made up ready for use. This is in intention a hospitable and friendly prac-

tice. But maids are human! There is always the chance that the bed still remains as made up for the last occupant, a fact which develops to the guest only as the cover is turned back, and which the hostess may never learn. The habit in other houses of keeping the bed spread only with the blankets and ornamental cover is not only safer, but also precludes the chance of offering a guest sheets which have gathered damp from lying. Besides, when a lace spread has remained undisturbed on a bed, even in neatly kept houses, there is a fair probability that the pattern of the lace is printed off in dust on the covering beneath. It takes but two or three minutes to put fresh sheets on a bed.

When the hospitable instinct strives with the prejudice which exists in the minds of some worthy people against putting sheets in the wash before they have had at least a week's usage, the effect on the chance guest is not always pleasant. In the pre-wringer days this disinclination to frequent washing of such large pieces was explainable. Nowadays not only have we the wringer, but the modern preference for single beds makes the sheets much easier to handle.

In the mere washing there is nothing easier to launder than a sheet. There is seldom any rubbing to be done, and the ironing is the simplest possible. To lament the extravagance of the Sunday visit because two sheets must go in the wash for only a couple of nights' use, is to place a very slight estimate upon the pleasure of one's friend's society.

There is a difference of opinion as to the use of linen and cotton. Cotton is certainly much warmer, but one who has lived in warm countries and felt the refreshing coolness of a linen sheet will not be satisfied with the woolly surface of the cotton. Some of the Southern families who, after the war, found themselves unable to replace their old linen sheets with new ones, had those of cotton starched and ironed to secure the gloss and smoothness. The initial expense of linen is much greater, but in the wear linen outlasts cotton in the proportion of three to one.

There should be plenty of towels, a bath towel, washcloth,

and a fresh piece of soap, ready for the invited guest. The towels should be changed frequently during her stay. If there is no bathroom connected with the guest chamber, the guest takes her bath towel with her to the bathroom and brings it back again.

The ink-well on the desk should be filled, a fresh blotter laid out and a stock of paper with the address and envelopes provided.

On the bureau should be a pincushion which can be used, and pins. The very fanciful and unusable cushions of former years have fortunately gone out of style. How many of us remember with awe the huge arrangements of satin and lace, sometimes trimmed with pearl beads into the bargain, which monopolized the most of the available space on the bureau's top, with the little much-pricked cushion for use at its side or in hiding in the upper bureau drawer. We are nowadays lucky in the embroidered linen cushion which can be done up again and again, its lace washed and pinned out to dry and its ribbons pressed.

Part of the furniture of the guest room bureau is brush, comb, and hand mirror. These are for the accommodation of one who becomes our guest without preparation on his or her part. Of course, one brings one's own toilet apparatus when coming to make a visit even of a night. A work-basket with thimble, scissors, needles, and white thread and black silk is a bit of furnishing much appreciated by the guest whose glove needs a stitch, or whose neat soul rejoices in the opportunity to sew on a fugitive button and avoid the mortification of the often treacherous safety-pin.

In the closet belong a bathrobe and slippers. Nothing else is in place there when the guest is expected to stay more than a night or over Sunday. The hostess who leaves her evening gowns and better light dresses in the closet which is to be used by a guest arriving with a fair wardrobe does so at her own peril. It requires a conscience of marked type of honor, and a keen sense of the rights of the things themselves, to make a person crush her dresses on a couple of hooks

when she could spread them out to advantage over those already occupying the remainder of the space.

The room must be considered as belonging to the guest for the time being. Her occupancy ceases only when she has departed with her trunks. It is not hospitable to strip the bed on the morning set for her going. It is extremely unwise also, for there is always a chance for some accident or change of plan which will detain her at least another night.

In a country house a card with the hours of the meals, the time of the arrival and departure of the mails, should be in every guest room. It is well to also mention the place where letters for the mail should be put. A time table or time tables of the railroads which are available for the guest should be part of the furniture of the desk.

THE INVITATION

The invitation should be explicit in the matter of time. "To spend a week with us," "To stay with us from Friday until Tuesday," "Can you come to us on the seventeenth and stay for the following week?" Some such form as this leaves no doubt in the mind of the visitor, and permits her to make her own plans for succeeding visits. The hostess should also state the train which will be most convenient for the arrival of a guest.

ENTERTAINMENT FOR THE GUEST

The length of a visit determines the kind of entertainment. One who goes to spend Sunday expects nothing but the pleasure of his hosts' society and the usual observances of the day. For a week or more the hostess plans the amusements in advance. In the city her arrangements, all made beforehand, comprise social pleasures, such as a luncheon, a dinner, the theatre, with plenty of time in between to rest. It is part of the duty of the city hostess to make her visiting friend known to her circle of friends, if the latter remains long enough to make it possible. In the South and West

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entertainments are given for the visitors of a friend, which is a very pretty and warm-hearted custom. Throughout the East the burden of entertainment is usually left to the hostess. Her guest, however, is included in all invitations she herself receives. If not, she writes to ask permission to bring the guest with her, except to dinners and luncheons, where the size of the table perforce limits the number.

The hostess also considers the desires of her guest as to shopping and plans for the time required. It is not necessary that she should accompany her unless the visitor is a very young girl. She also looks to it that her guest does not leave her after a first visit without having seen what the city has to offer in the way of historic buildings and places of interest. In such matters the hostess often profits as much as the guest. We are apt to be woefully ignorant of what is noteworthy in our native place.

In the country every opportunity to enjoy the sports of the place should be provided, and the guests permitted to avail themselves of them or to refrain from them at will. City pleasures appeal to the average American, but in the country we find that tastes differ amazingly. The hostess should learn beforehand if her guests play golf, or tennis, or are enthusiastic pedestrians, or are partial to long drives, and provide companionship as well as sport. To very many of us, particularly those not over young, what one longs for in the country is the quiet and rest. If a guest evinces a greater liking for the shaded lawn in the morning and an afternoon nap than for exertion, it is hospitality to permit the rest even at the neglect of favorite drives and amusements of the hostess.

There is one thing no hostess should do; that is, make her guests work, particularly her male guests. Perhaps women are more adaptable or have more sympathy with one's hobbies, or they may have the sense of return for bread and butter more developed. One often hears, "Mary did that for me when she was with me," "Anna helped me with that." But the house whose lawn and piazzas were entirely deserted of

men at flower watering time is a typical case of the sympathy of the male guest with his hostess's pursuits.

In the country the hostess charges herself with the conveyance of the guest and the luggage from and to the station. But while in the city it is always a graceful thing to meet the expected friend at the train, the guest will look after the luggage herself by giving the check to the agent of the baggage transfer company. She pays in advance if possible.

DUTIES OF THE GUEST

To be a good guest one must be unselfish, unassertive, pleased with what is provided for amusement, and philosophical over disappointments. The responsibilities begin with the arrival of the invitation. This must be answered at once. If the day and train mentioned are not possible and a later arrival is, the delay must be considered as shortening the visit. The guest makes every effort to take the train mentioned, but if obliged to come on a late one, begs the hostess not to trouble to meet her, and charges herself with the transportation of herself and luggage to the house. One thing no guest should ever do is to come on a train earlier than the one mentioned. A busy woman who is expecting company strives to get all small matters out of the way in order to have leisure to enjoy her friend's society later. An unexpectedly early arrival of the visitor might embarrass her seriously.

When one is asked to set the time for a visit within given limits, the date and the train must be mentioned in the acceptance. If a week or two elapse between the invitation and the visit, a note should be sent the hostess a day or so before the expected arrival, and the day and train again given.

The guest observes scrupulously the family order, holds herself at the disposition of the hostess at all times, but is not helplessly burdensome in the matter of entertainment. A visit is for many people a time of leisure which can be de-

voted to something in the way of work that finds no place in the daily home life.

If a visitor has other friends in the same place, her hostess warns them of the coming visit, and suggests the opportune time for calling. This is usually an informal "tea." She also makes it possible for her guest to return such visits, as well as to accept or decline all invitations from these friends. It is a matter of courtesy that the hostess should be included in such invitations, even though the inviters have not been previously known to her. Such invitations she will accept or decline herself, as she feels disposed. There is no obligation to accept.

A guest must keep her belongings in order. Whatever her habits at home, however spoiled by excess of service or by adoring relatives who pick up after her, when in the house of another it is imperative that she should not allow her possessions to obtrude themselves on the observation of others any more than her personality. She must never leave her work lying around in the sitting-room, and must at night always gather up all of her personal property which has been in use during the day and take it to her own room.

The guest avails herself sparingly of the stationery provided by her hostess. It is permissible to use it for occasional notes, but a voluminous correspondence should be conducted upon paper furnished by herself. The stationery of the house should never be used for business communications, as the address is very misleading.

A guest makes no claim on the time of her hostess, does not suggest, makes no comments on matters in the house or on the friends of her hostess, any form of entertainment, never claims the use of the horses. All drives and excursions are planned by the hostess. To ask the use of the carriage in the city for shopping, calling on one's own friends, or to convey one to and from entertainments, is to make the gravest of social mistakes. One should also accept of such courtesies when proffered as sparingly as possible.

A guest does not give directions to a servant, nor does she complain of neglect. In most families of moderate means all requests should be made of the hostess. In very large establishments one asks the maid who attends to the room of the guest.

A guest who has been staying more than a night in a house will recompense the servants for all service personal to her with a small fee. She remembers all with whom she has come in contact, especially the man who has had the task of bringing and carrying away her trunk. After a long visit, it is every servant in the house who must be feed. Large fees are not good form. From fifty cents to a dollar is all that is required, even after a visit of some weeks' length.

A guest takes pains to have all mail matter addressed in care of the host. This not only for greater safety, but as a matter of courteous acknowledgment of the position of a guest in his house.

A departing guest sends immediately on reaching home a note announcing the arrival, and expressing thanks for the kindness received. When the guest is young and has been visiting some young member of the family, this letter is not written to the special friend, but to the mother of the family or the person in charge.

A young man who has been staying with a college mate, or an old friend of the host's, alike addresses a note of courtesy to the one whose responsibility makes her the hostess. Special notes are due to the young friends as well.

It is good form on the next recurring church festival to send cards to commemorate the event to members of the family recently visited.

Family affairs should not be discussed in the presence of a guest.

One member of the family should never complain of another to a guest.

A guest should regard what she sees and hears in a family as sacred. Not the little things of everyday life, but such

occurrences and self-betrayals as she would herself desire to have kept from the outside world.

A guest does not monopolize the conversation, nor does she expect to be always the central figure.

She does not talk about herself or her family.

She does not attempt any overt missionary work in the family she visits.

XXVI

CARD AND CALLING ETIQUETTE

The Visiting Card—The Calling List The Name on the Card—The Double Card
 - The Mourning Card—The Code of Cards—"Not At Home"—The Business Call
 -—"P.P.C."—Closing an Acquaintance The Card of Introduction—Invitation by
 Visiting Card—Announcing a Death—Acknowledging Condolence—Formal Invi-
 tations—Answers to Invitations

THE VISITING CARD

THE visiting card is an indispensable adjunct to social life. Its use is not limited to visiting alone. A card with her address on it should be in every woman's purse for the purpose of identification in case of accident. Inclosed with a gift, with or without inscription, it is the easiest and neatest manner of announcing to the recipient the name of the sender. When fitted to an envelope of appropriate size it is an appropriate medium for short notes. It is used for many kinds of invitations. It represents the owner on all occasions when he or she is not able to be present in person.

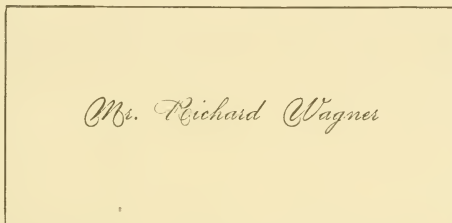
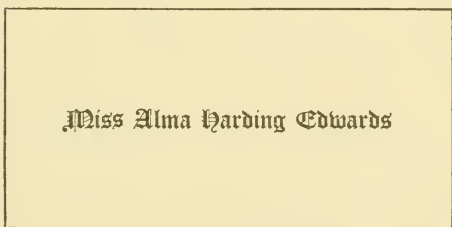
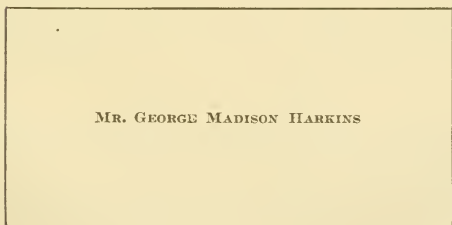
The form, material, and style of engraving indicate the taste of the owner. The size and shape, within certain limits, however, depend upon the whim of fashion. A lady's card should never exceed two and seven-eighths inches in length nor be more than two and one-eighth inches wide. This for convenience in handling. Nor should it be less than two and five-eighths inches long by one and seven-eighths inches wide, or there will be a perceptible lack of dignity.

A man's card is much smaller. It may be two and six-eighths inches in length by one and three-eighths in width. It should never be larger than three and one-eighth inches in length by one and a half in width. Too thick cards are not good form. Neither are those which are so thin as to muss easily. A man's card may be thinner than a lady's, in consideration of the space in his pocket.

Cards for both men and women should be smooth but not

glazed and have plain, not beveled, edges. Tinted cards, fancy scripts, the fac-simile of the owner's signature, unusual sizes, are all in bad taste.

The type used may be script (*A*), Old English (*B*), or Roman letters (*C*), as is preferred, *e.g.*,

A*B**C*

It should be clear and neither too small nor too large. It may be noted that in only one instance does society

permit the use of printing for social communications. That is when invitations must be recalled in such haste, owing to a death in the family or some other calamity, that there is no time to permit of making an engraved plate. When this occurs, the recall message is printed in a small, clear, and graceful type properly spaced on as fine paper as was used for the invitations.

The address for both men and women is engraved in the lower right hand corner. That is, a man's home address. Clergymen and physicians only may have their business address on their visiting cards. Cards engraved with the office hours as well, however, are reserved for professional visits.

In the lower left hand corner a man puts the name of his club and a woman the name of her day at home and the hours to be observed. Formerly a day at home once chosen was adhered to and observed religiously. The busy woman of to-day is seldom able to reserve one afternoon of each week for receiving. Certain days during the winter months are chosen, and cards announcing the fact are sent out early in the season. These cards are sent to the entire visiting list. There is no longer a strict debit and credit account kept in visiting. The system of special days does not admit of it. A family receiving "Thursdays, January seventeenth and twenty-fourth," although not owing Mrs. Edwards, who is at home "First and second Tuesdays in January and February," a visit, might easily find it convenient to call on a Tuesday in January. Too great an insistence on the letter of the law in visiting, moreover, implies a doubt of one's social position. A good deal of allowance is made also for professional women, young mothers, or invalids.

Any days or combination of days may be chosen provided the fact is made clear on the cards. In some cases the hours of receiving are mentioned, as "From four to six," or "After three o'clock." The number of days chosen must depend somewhat upon the size of the receiver's rooms, as well as the size of her visiting list. With but small reception rooms and a long list the days might better be many than too few. Not all one's acquaintances will appear in person. Very many will

be represented by cards either brought by some member of the family or sent by hand or mail, so posted as to arrive on the day of the reception.

These days, as well as the address, should be engraved upon all visiting cards used during the season. When not engraved they should be written. It is not fair to one's acquaintances to omit one's days from any card used for calling, since changes are so many in large cities in both day and address. So also one should never trust to a last year's card or to one's memory for either day or address. A wise woman

Mrs. Robert Roe

Saturday
June seventh
four until seven

Kenmore Place
Yonkers-on-Hudson

records all such matters in her visiting book at once on receiving the cards announcing "days," and empties the card receiver after each one of her own receptions to verify her list.

THE CALLING LIST

The accurate keeping of the calling list is necessary for one who proposes to do her part in society. Mistakes and omissions resulting from inaccurate addresses are not easily forgiven. The address of the person invited is one of the things a hostess ought to know. Neat little books are sold by all stationers to assist in the keeping of the calling list properly. They are indexed, and have spaces for name, address, and day,

and columns for the date of visits made and returned. If rightly kept they are invaluable when any large social function is to be given. The list of out-of-town friends and relatives should also be kept and corrected from time to time. People who do not take pains about their lists often suffer much mortification when cards which should have reached their friends come back through the "Dead Letter Office" for lack of proper direction.

THE NAME ON THE CARD

As to the name which is to be engraved on the visiting card, there seems to be some haziness of idea in many minds. There should not be when a clear distinction between a title and a signature is understood. It should be remembered that one never signs with a title. That belongs to the form of address. A man never signs himself "Mr. Henry Adams," nor do "Mrs." or "Miss" belong to the name subscribed to a letter. They are in their proper place on the visiting card. Moreover, the title of a married woman is not only "Mrs.," but her husband's name in full. It is Mrs. Henry-Adams, not Mrs. Caroline Adams, who appears in society, unless Mrs. Adams may chance to be a widow who has reassumed her own name for reasons which will be discussed later, or may be a divorced woman.

A man should remember also that his bank signature is not his social title. The initials which are in place in one case for the sake of brevity are bad form in the other. He may authorize the payment of a sum of money as G. M. Harkins, but in social circles he would be George Madison Harkins. The old-fashioned abbreviation Esq. does not belong on a man's card, nor does it follow his signature. It is properly a form of address only, and is used to replace Mr. on envelopes and may follow the name of the payee on a check. It may be used in addressing envelopes, though Mr. preceding the name is quite as correct.

It is the name on the card which should be used in addressing letters and notes of a social nature, not the signature. In business matters, on the contrary, a reply to a letter should

bear the name signed to the letter unless otherwise indicated. A married woman, therefore, in writing a business letter, would sign with her own name and her husband's surname, which is her legal signature, but should give her title (Mrs. Henry Adams) in brackets. A single woman would prefix her signature to a business letter with (Miss). No man, however, who had ordered a consignment of groceries as G. M. Harkins would make it apparent to his correspondent that the reply should be sent to George Madison Harkins. He would not sign a note of regret or acceptance G. M. Harkins, however, but George Madison Harkins. Society does not countenance any abbreviations or other signs of hurry or bustle. Dates are never written in Arabic or Roman numerals in formal social correspondence, but are spelled out. So, also, are the numerals in the name of the street in an address. The number of the house, on the contrary, is usually in Arabic figures.

The disapprobation of abbreviations extends in social matters to the use of initials in names. The middle name may be so represented, though the full name is much more elegant, but the first name should not be. Mr. George Madison Harkins might have his card engraved Mr. George M. Harkins if he desired and commit no social solecism. But to appear as G. Madison Harkins would be a grave mistake. If the use of the "George" was distasteful it might be dropped altogether.

A single woman likewise might be Miss Anna Grace Brown, or Miss Anna G. Brown, but should never either in signature or on her card present herself as A. Grace Brown. There is a certain disrespect and condemnation of the taste of one's parents in the selection of a given name in such a usage. Names may be dropped without disrespect, but if retained they should be used in full. It is also not good form to diminish both given names to initials on a card. Mrs. G. M. Harkins would not be the suitable card for Mrs. George Madison Harkins. Should Mrs. Harkins be the wife of the eldest representative of the family, she does not need to use any initials

at all. She is Mrs. Harkins, and may style herself so on her card. A single woman, also, if the eldest of her own family and belonging to the eldest branch of that family, would be Miss Brown, not Miss Anna Grace Brown. Even if not belonging to the eldest branch, when her name follows her mother's on a double card, her title is Miss Brown. Also when it precedes the name of her younger sister.

A widow whose married son bears the same name as that of her late husband may relinquish the title to her daughter-in-law and return to the use of her maiden name engraved before her late husband's surname on her cards, but there is no social law to this effect. As a rule the name of the husband is retained by widows. A confusion between two married ladies in the same family of the same name is obviated in the case of a widow by adding Sr. to the name of her husband. During her father-in-law's lifetime the younger lady would have her cards engraved with Jr. following her title. A woman physician who desires to announce her profession adds M.D. to the name; as for instance, "Miss Anna Fowler, M.D." If married, she does not use her husband's name, but her own. She would be Mrs. Sarah Gower, M.D., not Mrs. George Gower, M.D.

A divorced woman, unless she resumes her maiden name, uses only the surname of her former husband. She may prefix it with her given and middle name or with her maiden surname; that is, having been Miss Alma Harding Edwards who married Mr. George Jones, she may have her cards engraved either Mrs. Alma Harding Jones or Mrs. Alma Edwards Jones. If she does resume her maiden name, she would not become Miss Alma Harding Edwards, but Mrs. Alma Harding Edwards.

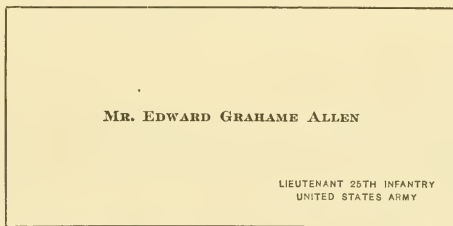
A man's card does not bear his title Mr. if there is another to follow. Henry Martin, Jr., would not have his card engraved Mr. Henry Martin, Jr.

A clergyman's card would read Rev. William Austin unless he has received the degree of Doctor of Divinity. The card

would then be engraved William Austin, D.D., but not Dr. William Austin. He would not be Doctor except in address.

A physician may use the contraction Dr. before his name, or the initials M.D. after it, as he prefers.

An officer of the regular army who ranks lower than a captain is plain Mr. on his cards. He may have the name of the division of the army to which he belongs put in the lower right-hand corner, and beneath it the words, "United States Army." In that case his rank precedes the name of his corps, as:



Members of the President's Cabinet use a card which bears their official title and no name. The Secretary of State appears as the "Secretary of State" and not as Mr. Hay in Society.

A Senator does not use given or middle name on his card. Mr. Depew, not Mr. Chauncey M. Depew.

THE DOUBLE CARD

A double card is often used for members of the same family. This is larger than the single card and more nearly square. The usual size is three inches and a half by two inches and a half. Such a card is used by a mother and daughter after the latter has been formally introduced. For the first season the daughter uses no other. If calling alone during this period she runs a light pencil line through her mother's name. After

the first winter she may use her personal card in making a personal visit. Such a card would read:

Mrs. Theodore Thurston Kennard

Miss Kennard

Thursdays in December

from four until seven

44 University Avenue

When there are two daughters in society the name of the younger may be placed beneath that of the elder.

Mrs. Theodore Thurston Kennard

Miss Kennard

Miss Mary Bent Kennard

Thursdays in December

from four until seven

44 University Avenue

After the first season of the second daughter the cards would read Mrs. Theodore Thurston Kennard, the Misses Kennard, etc.

A card of this kind, if left by but one person, implies a call from the whole family. It is this card which is sent out at the beginning of the season to announce the day at home. It may accompany a gift in which the whole family participate and is used for calls of condolence, congratulation, and of inquiry for invalids.

Sisters who have no mother may use a double card with the name of the younger below that of the elder, or the card may be engraved simply "The Misses Greene."

A daughter whose mother is not living may put the name of her father above her own on a large card, to be used for many social purposes.








The double card of husband and wife, which reads "Mr. and Mrs. Andrew Kellow Sutton," is used to announce to the friends of both the first reception days after the marriage. Such cards are inclosed with the invitations, or sent by mail soon after the return from the honeymoon. They are not used afterward except when calls of congratulation or condolence are made by both husband and wife. They may be sent with wedding, Christmas, or birthday gifts. In returning wedding visits the double card is not appropriate, though there is an attempt being made to revive the old custom of its use. A married woman, as a rule, uses her own card and leaves with it her husband's.

THE MOURNING CARD

Mourning borders on cards have their own etiquette. When the regulations for mourning are strictly followed, a widow or widower will use cards with a black border five-sixteenths of an inch wide. The widow will carry such cards for three years and diminish the border thereafter gradually until she lays aside her mourning. A widower does not change the width of the border during the period of his mourning. A parent mourning a child or a child mourning a parent uses a

border one-fourth inch wide. The mother diminishes the width of the band as she lightens her mourning. For brothers and sisters a black border an eighth of an inch wide is proper. This is gradually lightened. For distant relatives, one-sixteenth of an inch or the Italian border is sufficient. When widows or elderly women who have lost near relatives assume mourning for the rest of their lifetime, a border one-sixteenth of an inch is the correct width.

MOURNING BORDERS

Italian	- - - - -		Narrowest emblem of mourning
No. 1	- - - - -		For distant Relatives
No. 2, Narrow	- - - - -		For Brothers and Sisters
No. 3, Medium	- - - - -		For Parents and Children
No. 4, Broad	- - - - -		For Widows and Widowers
No. 5, Extra broad	- - - - -		For extra mourning
No. 6, Double broad	- - - - -		Seldom used

A black-edged card is never carried unless a person is in mourning garments. It is used for all occasions at which the owner is present and represents her when she does not appear.

It is unwise to order a large stock of mourning cards at a time. It is possible to have a quantity of perfectly useless articles on hand when mourning is laid aside. Such stock of cards should be destroyed. If kept for future service they betray their date through the changes of form and style of

lettering. The habit of some women to dispose of such cards when sending gifts or when calling on near relations is not to be commended. Like the second-best paper, the use carries very little compliment with it.

Ceremonious visits are not paid by people in deep mourning. When the mourning is lightened and visits are paid, it is obligatory that the borders on the cards of husband and wife should be of the same width. Sisters in mourning also when calling together should not have cards of varying borders.

THE CODE OF CARDS

Social usage tends to simplify matters of etiquette when possible. No better example of this fact can be given than the total abandonment of the elaborate code of information once conveyed by turning down the sides and corners of the visiting card. When it was in use authorities differed so much that it was impossible to tell just what the owner of the card intended to communicate. Nowadays a card left at the house implies a call, whether it may be brought by its owner or be one carried by some other member of the family. A separate card is left by each person calling on each member of the family which receives the visit.

When the double card is used, one should be left for the mother or chaperon, one for each daughter in society, and one for the friend who may happen to be staying with the family. In addition to her own card, or the double card of herself and daughters, a married woman leaves one of her husband's cards for each matron, and one for the husband of her friend. A motherless daughter leaves, in addition to the correct number of her own cards, one of her father's for each lady and one for the man of the house. Ladies do not call on men, but men call on all the ladies of the family, and the men, too.

American men in the large cities, for the most part, are too busy to do more visiting than is required for the acknowledgment of invitations. Ordinary courtesies in the matter of calling are intrusted to the wives or sisters, who see that

the requisite number of cards is left. An invitation, however, whether accepted or not, requires a call. When declined, it is good form to call on a Sunday afternoon before the event, but after the note of regret is sent. On such an occasion a man leaves cards for the mother or chaperon, for the young ladies and for the guest for whom the dinner, dance, or tea is to be given, and one for his host, if the latter has been mentioned in the invitation. Sunday afternoon is a man's day for calling in the large cities. Ladies do not call on Sunday except on intimate friends or on members of the family.

The whole number of cards is left only when the visit is socially significant. This is the case with large receptions, with the first attendance on a "day at home," with calls made in acknowledgment of an invitation, with calls of congratulation, when the person calling has changed his address, and with the final call before leaving town. The whole number of cards is left when making a call of condolence, but, as a rule, the visitor does not seek to enter the house.

A man never carries the card of another man, nor can he charge himself with the cards of his feminine relatives.

The etiquette for making the call on an off day for a lady is simple. If her friends are in the drawing-room, she puts her own card or cards to the proper number, and, if married, the cards of her husband for all the ladies and the men of the house, into the hall tray, and goes on into the room. If the maid says the ladies are at home, but she does not know if they are receiving, only the personal cards are sent up, and the caller goes on into the reception-room to wait the result of the inquiries. Should the ladies not receive, the additional cards which are to be left are laid on the table as the visitor passes out. There is no lack of courtesy in declining to receive on an off day if announcement cards for the reception days of the season have been sent out. A caller who comes on an off day does so with the full knowledge of this fact. She desires to pay the compliment of a personal call, but takes the chance of finding her friends at home or at liberty.

If a member of the family chances to open the door, it is not good form to give a card to her. One mentions the name, if not personally known to the individual, if the person called upon is out, and leaves no card. Nor can one present one's hostess with the card should she open the door. In such a case, if the visit is socially significant, the card is left on the table in going out. It is permissible to give one's card to a child should she open the door, whether the friend is at home or not.

A man calling with a friend upon a lady whom he has not known previously, will leave his card on the hall table as he goes out if the call is paid on her day at home. He writes his name in pencil on the card his friend sends up if the call is paid on an off day. If the lady is not at home, he leaves no card, unless he is calling at her request or at his own. This rule holds good whether his friend and sponsor is a man or a woman. When a man pays his first chance call on a young lady, he sends up a card for the mother and chaperon. He does not leave the ceremonious number of cards except when the call has a ceremonious meaning. For ordinary evening visits one card will suffice, and if intimate in the family, after the first visit of the season no card is necessary if the ladies are at home. Both men and women leave a card for even intimate friends, unless some member of the family has been seen by the caller.

When making visits, attending receptions, or days at home, the cards for the occasion should be held ready in the hand before the door is opened. The etiquette for receptions, teas, and days at home is the same—the cards are laid on the table or in the tray offered by the servant as the visitor passes on into the drawing-room. At an afternoon reception, if the visitor desires to remove the outdoor wrappings, the cards are laid on the tray as he or she enters and before going to the dressing-room. When the visitors are announced, the name is mentioned to the butler in a low tone, but clearly enunciated. Many ladies have the callers announced for even days at home. It is a practice which saves a great deal of em-

barrassment when one is a newcomer in the town, especially if the hostess has not a good memory for faces. In such a case the butler reads the name from the card which the caller hands him.

"NOT AT HOME"

Many people with a regard for literal truth object to the current phrase "Not at home," which is used indifferently, whether the person is actually in the house or not, when one is disinclined to see visitors. It is only a manner of speech corresponding with the "At home" on an invitation. There is no need of its use, however. The information can be otherwise conveyed. The visitor does not care to know that Mrs. Brown is at home in the literal sense or not, but whether if at home he may see her. He should ask if Mrs. Brown is "receiving." The servant in reply may state without damage to either her conscience or that of her mistress that Mrs. Brown is not receiving, or that Mrs. Brown is out, as the case may be. When one does not receive, the maid or footman who opens the door should be informed of the fact before the door is opened, and be prepared for the inquiry. A person calling on business when met with this information, is justified in stating the fact and in asking the servant to inquire if Mrs. Brown will see him. The phrase applies to social and not to business visits.

A card should always be sent up to a person boarding in a hotel or private family, and on such cards it is safer to write the name of the person for whom they are intended in pencil. It may be mentioned that while a visit anywhere without a card except in the instances mentioned has no social significance, a call upon a person boarding, if the person is out, is likely to be time thrown away unless a card is left to announce the fact of the visit. When the card is left for a friend, the name of the friend should be written as above.

When calling on a friend who is staying with some one whose acquaintance is not possessed by the caller, the latter should leave a card for her friend and for her entertainer,

though she would not necessarily expect the visit to be returned by the latter.

THE BUSINESS CALL

Business calls when made by women on women require but one card from the caller. It is courteous to send a message concerning the nature of the errand, and if the person sought is out such a message may be penciled on the card. This rule holds good for men who call on women on business, unless the business is of such a nature that a business card is left. Women calling on men on business at their residence should never neglect to send a message of explanation with the card. A woman invariably sends her card to a lawyer or a doctor, and in some cases to a broker, when she is obliged to wait in an anteroom.

Any temporary change of address should be written above the home address, as when, for instance, a woman is calling on friends in a city some distance from her residence. The length of the stay is also written on the card. A card so inscribed is sent to all acquaintances on one's arrival in a place, whether one is staying in a hotel or visiting friends, if social attention is desired. A man should call upon all ladies whom he wishes to inform of his whereabouts, leaving a card with the address, but he may post his card and temporary address to his masculine friends.

"P. P. C."

It is good form when leaving a place for any considerable length of time to send out just before leaving, or to have posted for one immediately after one's departure, visiting cards with the letters P. P. C. written in one corner. These initials stand for the French phrase "*Pour prendre congé*"—to take leave. Such cards are sent to one's entire visiting list. They are not used if the length of absence is short, or when it is merely the usual change of quarters from the city to the country, or vice versa. Such cards are sent when one has been in a place for some time and has been largely enter-

tained, but the intention to send them does not relieve the sender in such a case from other acknowledgment of the courtesies offered. It is only an announcement of departure.

Visits of sympathy and of congratulation may be acknowledged by cards sent through the mail or by hand. An invitation to a church wedding requires a card to be left on the bride's mother. It is good form, when entertained as a member of a club or other organization, to leave a card on the hostess, if she is previously unknown. When an acquaintance, a call is required.

There are some occasions when cards are left at the house without the intention of entering. This is the case when calls of condolence are made, and visits of inquiry for invalids. These should be left in person. The acknowledgments may be sent by mail.

CLOSING AN ACQUAINTANCE

When it is desired to close an acquaintance, the formal number of cards is left at the door on an off day without inquiring if the lady is at home. The phrase "Please give these to Mrs. B." is used. There are very few occasions in American society when such a course is justified. People who are in disgrace or misfortune need no such reminder of the circumstances. Besides, there is a chance that the wrong conclusion might be drawn. It is the custom of some very busy women to bring their social accounts to a balance at the end of the season by taking the trouble of sending their carriage and footman around just before they leave town with cards for all their acquaintances, the proper number for each house being put in an envelope addressed to the senior lady of the family. In the official circles of our government no other acknowledgment of a visit on the regular reception day is possible.

THE CARD OF INTRODUCTION

When the visiting card is used to replace the more formal note of introduction, it is sufficient to write above the name

of the owner a phrase of introduction. "Introducing Miss Clara Thorpe." "Presenting Mr. Herbert Meredith." This card is given to Miss Thorpe or Mr. Meredith, inclosed in an envelope which fits it, on which, besides the address, is written in the lower left-hand corner "Introducing Miss Thorpe."

INVITATION BY VISITING CARD

The visiting card is used as a medium of invitation for many occasions. It is inappropriate for very formal functions, such as "At Homes," receptions given to introduce a daughter to society, for large balls, and for dinners.

Ordinary receptions, afternoon teas, dancing parties, cotillions, are perfectly suitable occasions. When so used the day or days at home are omitted from the card, and in their place is written the day and hour of the occasion. A mother and daughter use the large double card, as do husband and wife, or sisters. When a married woman has no daughter, according to the present social usage the card used is the large double one of her husband and herself, even though he does not expect to appear on the occasion. An unmarried woman uses her ordinary visiting card, with the day and hour of the function written in the place of the day at home, as above. This card is used for all teas except those which are very small and informal or impromptu. For such occasions notes should be written announcing the object of the gathering.

ANNOUNCING A DEATH

The foreign custom of sending out cards announcing a death in the family does not prevail to any extent in America. It is considered sufficient to insert a notice of both the date of the death and of the funeral in one or more newspapers. Such papers are mailed to distant friends. In our own opinion the announcement card is more seemly and dignified.

ACKNOWLEDGING CONDOLENCE

Courtesies received by the bereaved and sympathy expressed to them are acknowledged by means of black-bor-

dered visiting cards inscribed with a suitable message sent in black-bordered envelopes through the mail. Thus a widow will write upon her mourning cards "With sincere appreciation of your kind sympathy," or "Thanking you for your kindness and sympathy," and send them out soon after the funeral. Husband and wife may use the double card, black-bordered and suitably inscribed. Or a plate may be engraved in the following manner, and the requisite number of cards struck off as soon after the funeral as possible. Such cards have a black border a quarter of an inch wide or more, and are of the size of the ordinary double card.

[Script]

The family of the late
Henry Wadsworth Smith
acknowledge with grateful appreciation
the kind expression of your sympathy
in their great sorrow

Such cards bear no address.

FORMAL INVITATIONS

Invitations may be formal or informal, according to the size and significance of the occasion for which they are intended. As has been said already, the visiting card suitably inscribed is used as a medium of invitation to receptions, teas, dances, cotillions, card parties, buffet luncheons. It may not be used to convey invitations for a reception given to in-

roduce a daughter to society, nor for a formal dinner nor a luncheon.

The visiting card so used is as formal as the card engraved for the occasion. When a very large affair is given it is much less trouble to have a form engraved either on a large, square card or on fine note paper. This is of a size to fold but once to fit the envelope. The prevailing style varies a little from year to year. When a large affair is planned, it is well to consult the leading stationer both as to size of card or paper and style of engraving. Engraved cards are used for large balls, very formal dinners, or large receptions. The form is in the third person, and without abbreviations.

The correct invitation to a reception would read:

[Script]

Mrs. George Clerc Stephenson

The Misses Stephenson

will be at home

on Saturday afternoon, December the seventeenth

from four until seven o'clock

22 Hillside Avenue

Where there are no daughters to receive with the hostess, it is customary to issue invitations in the name of the husband and wife.

It will be noticed that there is no punctuation except the

comma which separates the name of the day of the week from the day of the month, and that the latter is preceded by the article.

The formula for a ball is similar, except that "Dancing" is put in the lower left-hand corner, and the hour of the expected arrival only is mentioned.

The following formula is used in engraved invitations only. It violates a convention of grammar which exacts that the third person can not correctly be employed to address the second, but its convenience condones its use:

[Script]

Mr. and Mrs. George Clerc Stephenson
request the pleasure of your company
on Friday evening, April the eleventh
at nine o'clock

Dancing

22 Hillside Avenue

It would be more elegant were there a blank left, as in the form of dinner invitation given later, where the name of the guest would be written in ink.

If there is to be a cotillion after the supper, the fact is denoted by putting the word Cotillion under Dancing. When the function is a cotillion pure and simple, there is no need of "Dancing." In its place "Cotillion" stands alone.

An engraved invitation to a dinner, if couched in the most

approved form, would have blanks left for the name of the guest and the date and hour to be filled in by the hostess.

[Script]

Mr. and Mrs. George Clerc Stephenson

request the pleasure of the company of

.....

at dinner

on.....evening

.....

at.....o'clock

22 Hillside Avenue

Dinners to which such cards serve as invitations are intended to be most formal. An invitation to a formal dinner may be written also by the hostess on note paper. The form above is followed. The spacing may be that of the card or the note be written continuously with a margin left on both sides of the page. It is not good form to break a word and continue on the next line in such a note, though perfectly allowable in correspondence. Such notes are not dated. If the address is not engraved at the top of the paper, it should be written below at the right-hand side of the page and within the margin, not from the edge of the sheet. The paper used should be of fine quality, preferably white, and may be engraved with a monogram, or may have the address at the top of the page in delicate letters, either black or gilt. It should fold once to fit the envelope. The invitation should cover

but one page, and be so spaced that there is as much margin below as above.

Should the dinner be given in honor of a guest or a newly married couple, the guests are asked to meet these persons:

[Script]

*To meet
Mr. and Mrs. Walter Adams
Mr. and Mrs. George Clerc Stephenson
request the pleasure of your company
at dinner
on Friday evening, April the eleventh
at half after seven o'clock*

22 Hillside Avenue

"To meet Mr. and Mrs. Walter Adams" may also be written either across the bottom or across the top of the form of invitation shown on page 361.

A communication in the third person is much the simplest and least intricate method of giving invitations to a dinner or luncheon, in that a given formula is used. As far as the style of the occasion itself is concerned the manner of the invitation makes but little difference. There are no fewer courses when one's company is solicited by a friendly note in the first person nor does one come to a dinner of any kind except in full dress. "Very informally," when inserted in an invitation, means only that the spirit of the entertainer is more friendly than formal. There are, however, many people who prefer to write the invitations in the first person except for what are intended to be very formal occasions. Such a note might read:

"MY DEAR MRS. HASTINGS:

"If you and Mr. Hastings have no previous engagement for April the eleventh, will you give us the pleasure of your company at dinner at half-past seven o'clock? Trusting that we may be fortunate enough to have you with us then, I am,

"Most sincerely yours,

"MARY BEECHAM STEPHENSON.

"March the thirty-first,

"22 Hillside Avenue."

Or to an intimate friend:

"MY DEAR MRS. HASTINGS:

"Can you and Mr. Hastings dine with us very informally on the evening of Friday, April the eleventh, at half-past seven o'clock? Our friends Mr. and Mrs. Ellington Bramley of Alabama will be with us and I would like them to meet you and Mr. Hastings.

"Trusting that we may be fortunate enough to have the pleasure of your company, I am,

"Yours very sincerely,

"MARY BEECHAM STEPHENSON.

"March the thirty-first,

"22 Hillside Avenue."

An invitation, be it noted, is not a letter. It should be as short as possible, with no superfluous words. The reason for the entertainment should be mentioned, if any exist, beyond a desire to return courtesies received.

The rules for dinner invitations hold good for those issued for luncheons, except that form of luncheon known as a "buffet luncheon." This, as has already been said, permits the use of the visiting card as a medium of invitation. In such a case the card would be inscribed in the lower left-hand corner with the word "Luncheon" and the date and the hour below it.

ANSWERS TO INVITATIONS

Invitations to dinners, cotillions, luncheons, and all very small teas to which one is asked by note or the cards to which bear the initials R. S. V. P. (standing for the French phrase "Répondez s'il vous plaît"—Kindly reply) should be acknowledged at once. It is permissible to accept for a large function, even a large card party, on the chance of being able to attend. An acceptance of an invitation to a small card party or to a

dinner or a luncheon is a binding engagement (especially in the case of the two latter), and no chances may be taken. If accepted, when by reason of illness or a death in the family, or the severe illness of the guest, she or he can not be present, notice of the fact should be sent to the entertainers at once.

When a married couple are asked to dinner, the invitation may only be accepted if both husband and wife are at liberty. Should either be ill or business call the husband away from the city after an acceptance, a note expressing the regrets of both is required. A father may ask permission to take his daughter in society to fill her mother's place, or a mother her grown son, should the detention be unavoidable but not a calamity. Husband and wife are not asked to dinner without each other unless the company of either is requested as a favor to fill a vacancy.

Invitations written in the third person require an answer in the same person. Invitations in the third person to a married couple are addressed to Mr. and Mrs. Howard Hastings. The reply should be addressed to Mr. and Mrs. George Clerc Stephenson. An invitation written in the first person is addressed to the wife and the envelope so directed. The reply is to the writer.

The formula of the invitation is repeated as far as possible in the reply:

"Mr. and Mrs. Howard Hastings accept with pleasure the kind invitation of Mrs. George Clerc Stephenson for dinner Friday evening, April the eleventh, at half-past seven o'clock.

"17 Albemarle Terrace,
"March the thirty-first."

While the invitation in the third person does not bear a date whether engraved or not, the reply should have both date and address. When the address is at the head of the paper the date is as a rule written below at the left hand as in an ordinary note.

When an invitation is declined in the third person, the form of the invitation is followed, and the reason for declining is mentioned if possible:

“Mr. and Mrs. Howard Hastings regret that illness in the family prevents their acceptance of Mr. and Mrs. George Clerc Stephenson’s kind invitation for dinner on April the eleventh at half-past seven o’clock.
7 Albemarle Terrace.”

After an acceptance has been sent a note written to explain that the writer will not be able to be present is in the first person in any case. It is not a matter of form, but a direct communication between the writer and the hostess.

An invitation written in the first person must be answered in the same form. To reply to an invitation to a luncheon, dinner, or small tea given in the first person in the third is to close the acquaintance at once.

An acceptance written in the first person should repeat the terms of the invitation in full, but in a note of regret it is not necessary to mention the hour of dinner or luncheon. It is mentioned in acceptance in order that there may be no mistake in the mind of either hostess or guest.

For example :

NOTE OF ACCEPTANCE

“MY DEAR MRS. STEPHENSON :

“Mr. Hastings and I, fortunately for ourselves, are free for the evening of Friday, April the eleventh, and shall be most happy to dine with you at half-past seven o’clock. Mr. Hastings joins with me in kind regards to yourself and Mr. Stephenson.

“Cordially yours,

“EDITH CAMPBELL HASTINGS.

“7 Albemarle Terrace,
“March the thirty-first.”

NOTE OF REGRET

“MY DEAR MRS. STEPHENSON :

“The necessity which calls Mr. Hastings to Boston for the greater part of next month compels us to forego the pleasure of dining with you on Friday, April the eleventh. With best regards to yourself and Mr. Stephenson and sincere regrets from us both, believe me,

“Cordially yours,

“EDITH CAMPBELL HASTINGS.

“7 Albemarle Terrace,
“March the thirty-first.”

If an invitation is declined because of a previous engagement the note should be so worded as to express regret with-

out disparagement of the earlier invitation. Such a note might read:

"MY DEAR MRS. STEPHENSON:

"Had not Mr. Hastings and I already accepted another invitation for Friday evening, April the eleventh, nothing would have given us more pleasure than to dine with you on that evening. With best regards to Mr. Stephenson and yourself, in which Mr. Hastings joins, believe me,

Regretfully yours,

"EDITH CAMPBELL HASTINGS.

"7 Albemarle Terrace,
"March the thirty-first."

It is not a possible thing for a person who has once declined an invitation to a dinner or luncheon to reconsider unless specially requested to do so by the hostess. To teas and receptions one does not send either acceptance or regret, unless requested to do so by the initials R.S.V.P., except when there is no possibility that the person invited will be able to attend. In such a case cards are sent through the mail at once. As a rule, one either goes on the day or sends cards by hand or by mail. Should a person after sending regrets to a tea desire to attend, courtesy requires that a note be sent the hostess informing her of the fact.

It should be observed that while it is quite correct to speak of an acceptance, there is no corresponding noun of negation derived from the verb to decline. Declinature which is sometimes heard is not in use, and declension means a totally different thing. The correct phrase is a note of regret. Colloquially one "regrets."

XXVII

RECEIVING AND ENTERTAINING

The Day at Home—The Afternoon Reception—The Menu—Reception Dress—Assistance in Receiving—The Evening Reception—The Afternoon Tea—Refreshments—Service—Decorations—The Formal Luncheon—The Table—The Menu—The Service—The Formal Dinner—The Menu—The Table—The Service

THE DAY AT HOME

THE day at home has its own customs. If the hour is not stated on the visiting cards of the hostess, she must be ready to receive any time after three o'clock. Tea is not served before four, however. This is really tea accompanied only by light cakes and bread and butter. The tea table is either in the drawing-room or in the adjoining apartment, never in the dining-room unless the house boasts of but the two rooms. It bears the tea equipage and the plates of cakes and bread and butter and a vase of flowers. There should always be sliced lemon provided. A small decanter of rum for Russian tea is sometimes seen, but the rum is neither obligatory nor necessary, and it can be omitted. It is not practicable for the hostess to attend to the tea table herself. That is the place of the daughter of the house or of some young friend. When the hostess can call upon neither daughter nor friend, the tea is served by a maid.

A day at home requires a maid in constant attendance at the door, and another if there are many visitors, to look after the cups and hot water.

The hostess rises to receive each newcomer, and introduces her to the other guests, if there are only two or three present. It frequently happens that when the days are few there will be many visitors in the room at the same time. In that case, the introduction is made to the few nearest only. A conversation between two or more guests at a distance from the hostess should not be interrupted by an introduction to the newcomer.

It is good form to speak to any one whom one meets at a friend's house whether introduced or not. The entrance of a new caller is often made the occasion by an earlier visitor of taking her leave. In that case, no introduction is necessary. The hostess does not accompany the departing visitor to the door on reception day or at any other time.

It is a canon of social etiquette that the names in an introduction should be made as clear as possible. An indistinct enunciation on the part of the hostess is unpardonable. So is inattention on the part of people introduced. The excuse for blunders in names or forgetfulness so often heard, "I have no memory for names, but I never forget a face," is no excuse at all. It is the business of a woman in society to remember both names and faces, even if she is at some trouble to conquer a wandering habit of mind in order to do so. A woman noted for her social tact once confessed that names were her bugbear, and her only means of saving herself from embarrassing situations was to listen intently, to ask the name immediately if she had not understood, and during the first interview to use the name occasionally in addressing her new acquaintance. In this way she was able to connect name, face, general appearance, as well as voice and conversation, and rarely made a mistake in either the identity or the circumstances of the first meeting. It may be remarked that there is no worse social solecism than to leave an acquaintance in doubt of one's personality. To enjoy the consequent confusion is extremely underbred. The "Oh, you don't know me" habit of some women is in execrable taste.

THE AFTERNOON RECEPTION

As has already been stated, cards engraved for the occasion are the suitable invitations for a reception given to introduce a daughter in society, one given in honor of some distinguished stranger, or one intended as a courtesy to a bride and groom, as well as for a wedding reception.

For such receptions an awning from the door to the curbstone is furnished in stormy weather. On a pleasant day there

is a strip of red carpet laid. There should be a man in outdoor livery to open the carriage doors who is provided with carriage checks. A footman in afternoon livery opens the door of the house, and a butler in evening dress announces the guests as they enter the drawing-room. There should be a maid or maids in the ladies' dressing-room and a man or a "buttons" in the room where the men leave their hats and coats. It is usual at all very large receptions to have these attendants furnished with hat and coat checks, which, like carriage checks, consist of duplicate numbers on bits of paper, one of which is pinned on the garment and one given to the owner.

In arranging a house for the occasion, all large pieces of furniture are removed from the rooms used for receiving. A sofa or two may be left against the wall and a large chair in a corner for the benefit of an elderly guest. The mantels are decorated with flowers. The hall may have palms or other embellishments. There should be no arrangement, however attractive, which takes up room that belongs to the guests.

An orchestra of stringed instruments, with or without a piano, is placed out of the direct line of movement to reception and dining-room and screened by palms or flowers. The selections rendered are soft and serve only as an agreeable accompaniment for the voices. Sometimes a programme of music is arranged, but it is extremely unsatisfactory to both performers and audience. The one do not receive the attention their efforts deserve and the other can not enjoy what is offered them with a quiet mind. A reception is not a musicale.

In the dining-room the chairs are set close together against the wall, for while most people prefer to stand while drinking their cup of tea or disposing of an ice there are many to whom it is a real torture to eat standing. The dining-room table may be bare, with handsome centrepiece and doilies. The floral decoration in the centre of the table should be large and graceful. The appliances for tea and coffee are placed at the head and foot, and small dishes of bonbons and salted almonds, small cakes and sandwiches set here and there. The

plates, knives, forks, and spoons, as well as napkins, are on the sideboard. These are furnished by the caterer, who also provides the awning, all the service required, and the music.

The silver, glass, china, and napery of the family are put away under lock and key. This is requested, as a rule, by the caterer. All the house must be in perfect order. The bathroom especially must be spotless, the silver or nickel fittings shining, fresh towels hung out, and with no medicine bottles left around. All bureau drawers and closets should be locked, for not only must one guard against the possible entrance of sneak thieves on such occasions, but against the inordinate curiosity of otherwise well-bred people in one's own station in life.

THE MENU

The menu may consist of one or more hot dishes, such as croquettes, served with green peas, pâtés, oysters à la poulette, a choice of salads, ices, cakes, tea and coffee, bouillon, chocolate, punch or lemonade. Punch and lemonade are not usually served in the dining-room, but at a small table in the hall or library.

The hostess and her daughters should be ready at least half an hour before the hour mentioned on the card. The guest of honor must reach the house not less than a quarter of an hour earlier than the guests are asked. The friends asked to assist should also be punctual to the minute.

RECEPTION DRESS

The hostess and her daughters, as well as the guest of honor and the receiving ladies, wear handsome gowns high in the neck with long or elbow sleeves. The hair is handsomely dressed, but few jewels are worn. The young members of the party, especially a *débutante*, wear white. Gloves are worn throughout the afternoon.

ASSISTANCE IN RECEIVING

It is customary for the hostess to ask several of her friends to assist her by pouring the tea and coffee in the dining-room.

These ladies relieve each other at the task. They chat with the guests who come to them to be served and assume the part of hostess for the moment.

Other ladies are invited to assist in receiving. These ladies are privileged to speak to any one without introduction. It is their duty to see that shy guests are conducted to the dining-room and introduced to the ladies pouring tea. With such assistants in the dining-room and drawing-room the hostess is able to give her entire attention to the arriving guests.

A *débutante* may ask a number of her friends, who are also in their first season, to receive with her. Such young ladies stand just beyond the daughters of the house. The more mature ladies who are receiving may remain near the hostess for the earlier part of the afternoon, but their duties will not allow them to maintain any one position in the rooms. The hostess and the guest of honor do not quit their posts during the reception.

Unless the rooms are small, short hours are better than long ones. The object of the guests being not only to greet the hostess but to see the other guests, the greater number present at any one time within limits of comfort the more successful the reception or tea. The ladies who receive are not obliged to remain until the last guest departs if they have engagements elsewhere for the evening.

THE EVENING RECEPTION

A reception given in the evening differs but little from one given in the afternoon, unless dancing forms part of the programme. The supper menu may be a little more elaborate, and in some circles champagne is served with the supper. It is good form to provide the dressing-room destined for the men with cigars, cigarettes, and either Apollinaris or White Rock or some sparkling water.

The reception of the *débutante* is often followed by a dance in the evening. When this is the case, a card stating the fact is inclosed with the invitation. In some cases the informa-

tion is given on the cards, two sets of hours being mentioned: "From three to seven, and from eight to ten." The hostess takes pains to ask her young friends verbally and by means of personal notes to come in the evening. The interval between the hours is employed by the receiving party in changing from afternoon to evening dress and in dining. The dinner is served by the caterer at small tables which are brought into the larger room and removed after the meal is over.

AFTERNOON TEA

Though more informal than a reception, an afternoon tea may embrace the entire visiting list. It may also be confined to a select few. In either case the invitation is the visiting card of the hostess, with the date and the hours written in the lower left-hand corner. If the "tea" is given for a friend, the form would read thus:

Mrs. James Elde Browne
To meet Miss Jones, of Louisville
Monday, January Fourth
From four to six 123 Maple Avenue

When the number is very limited, it is an hour, not hours, which are mentioned, as for instance, "Tea at five." It is perfunctory to mention the home of the guest to be complimented if she is not a native of her hostess's own town. It is, as we have said, the generous custom of the West and South to entertain the guests of one's friends, and a visit of more than a few days is usually ushered in by a "tea" given by her hostess or some intimate friend of the latter. In this way the visitor makes at once the acquaintance of those whom she will meet later, and finds herself from the first a part of the social life.

If the "tea" is a large one, the services of the caterer are usually called in, and the menu may be the same as at a reception; or it may be limited to salads, ices, sandwiches, beverages, and cake. The strip of carpet on the steps is not

required nor the awning unless the day is very bad, and the announcer is not a necessity. The whole service may be performed by maids. These should be in ordinary black dresses worn in the afternoon, with white aprons having bibs and shoulder-straps and with caps. The fashion of the caps varies from season to season. They should be fresh, dainty, and alike for all the maids on duty.

REFRESHMENTS

The smaller the number of guests the more simple the refreshments provided. Many give only a choice of hot beverages, with lemonade or punch and sandwiches and cake. The imagination of entertainers is ever at work to produce new varieties of sandwiches, and there seems to be no end to palatable combinations. Finely chopped chicken mixed with mayonnaise dressing is an old favorite. The mixture is spread upon the bread and a crisp leaf of lettuce or the leaves of watercress laid on it, before the second slice is pressed down on top. The lettuce must be very tender and the mayonnaise highly seasoned with pepper and salt and a dash of walnut catsup. Different kinds of nuts are chopped and mixed with thick cream well salted, or with Neufchatel cheese for a filling. Potted ham and potted tongue make delicious sandwiches. Sandwiches are also made of green peppers, of radishes, of asparagus, and of the yolks of hard-boiled eggs rubbed smooth; all these mixed with mayonnaise dressing as for chicken sandwiches.

Gluten bread is sometimes cut into thin slices and spread with Neufchatel cheese. Five or six slices are then laid on each other and pressed together, and then cut through to show the alternate layers of white and brown. A sweet sandwich is made by spreading the delicate round salted crackers with Neufchatel cheese and putting a layer of guava or currant jelly above. When the filling is caviare seasoned with the juice of a lemon, the sandwiches after they are made are trimmed into rounds with a tin cutter. The bread used for all sandwiches should be fine in grain, and tender, but not short.

Cake should be either cakes, and the smaller the better, or be cut into small pieces convenient to handle. All layer or filled cakes are tabooed. So are soft frostings or anything which may not be eaten with comfort without removing one's gloves and calling for a finger-bowl. Fancy biscuits, salted nuts, all the varieties of candied fruits and bonbons are put on the table. There should always be some plain bread and butter, both white and brown.

For hot beverages, coffee and chocolate can be more easily managed for a number of people than tea, since they can both be made beforehand and require only to be kept hot. When tea is served, however, if the one who pours is provided with two teapots and plenty of hot water, there may be no trouble in serving it both hot and fresh. The secret of good tea lies in never allowing the water to stand on the leaves, between times. It is the Japanese practice to pour off all liquid after the desired number of cups have been filled. When more tea is required fresh boiling water is poured on the same leaves. In this way a surprising number of cups of good tea can be made from the same leaves, and the disagreeable bitter taste which betrays the presence of tannin is not apparent. When the leaves are exhausted the pot is sent out to be emptied and the server uses the other. Sometimes the tea is tied up in small bags made of white Swiss muslin, to facilitate in removing the tea leaves.

In the matter of the tea itself, there is a word to be said. A poor tea-maker will ruin the taste of the best sort of tea, but even skill will not replace quality entirely. Our English cousins laugh at us good-humoredly on account of our preference for "pure teas." No Englishman would permit a spoonful of pure tea to go into his teapot, and those of us who have drunk of our cousin's beverage know that his taste is good. The blend is a matter of taste, but there is always required a heavy tea for body and one of delicate quality to give the flavor. An excellent mixture is ten parts of English breakfast tea to three of Ceylon and one of Orange Pekoe.

THE SERVICE

The maids attend to the wants of the ladies who pour the tea, but do not wait upon the guests at a small tea. It is well for even a small affair to have some one in attendance in the butler's pantry to wash the cups and spoons as they are brought out.

DECORATIONS

The decorations of the house depend upon the size of the "tea." For one's whole list the house is prepared as for a reception. If the number asked is small the furniture is left as usual, but the house must have a festal appearance. Flowers are always in good taste. For even the smallest affairs of the kind, however, all evidences of the everyday occupations should be removed. The guests are invited to spend an hour or so with the family, not to share their life. For the time being the house belongs to them. So does the hostess. All family cares, all preoccupations must be put in the background, and she must give herself up to her guests. Else they will miss something they have a right to claim: the gracious friendliness and cordial interest which are the charm of hospitality, and the hostess will lose the real value of the occasion to herself, in the absolute change of thought, the freshness of perception gained by turning one's mind into a new channel for a little time. The interchange of hospitality is that feature of modern life which makes existence in these hurried days endurable, but she who does not give herself up to it for the moment misses her opportunity to pause and begin afresh.

THE FORMAL LUNCHEON

No more complete example of the fact that society in the daytime is handed over to the women of the family can be cited than the formal luncheon. Men find their way to teas and receptions, but the purpose of a luncheon party is marred by the presence of a single black coat.

The luncheon comes next to a dinner in importance as an entertainment. The invitations follow the form for dinner in-

vitations in the third person, or they may be friendly notes. They may be sent two weeks in advance. In selecting one's guests for a luncheon party some care should be taken to bring only congenial people together. Under no circumstances should a number of shy, badly assorted strangers be collected for two hours' martyrdom. Yet the party should never be composed solely of persons who meet daily or weekly. New blood is as valuable at the luncheon table as elsewhere. The menu is lighter and shorter than at dinner, and wine is not only not a matter of course, but is never used except when the guests are either married women or beyond young ladyhood. It is never seen at a *débutante* luncheon except in some Southern cities, where a single glass of champagne is allowed.

THE TABLE

When the number of guests is very large, the luncheon is served at small tables seating four or six persons. The more usual number, however, is the twelve or fourteen who may be seated at an ordinary dining table. This is set as for dinner, but without the candles. Artificial light in the daytime is not good form unless the day is very dark and gloomy. Name cards are always used and lie on the napkin at the side of the plate. Fashion has set its ban on souvenirs. Flowers only are excepted, but very handsome luncheons are given without the bunch of violets or carnations which good form alone permits at the present date.

Fashion has decreed that the large epergne or floral centre-piece is out of place on a dining table. It was certainly most inconvenient when one desired to see one's opposite neighbor. Low flat dishes of flowers are good form, and only space limits the number of small silver dishes of bonbons and nuts. It is permissible to have the handsomely polished table bare, with embroidered or lace-edged doilies at each place. The well-laundered damask tablecloth is also used. The style of the decorations is a matter of individual taste entirely. A woman with invention can produce lovely effects at small expense. There should always be flowers, and as many flowers

as possible. These may be in low dishes or powdered on the white tablecloth. The delicate leaves of the Japanese maples used in this way produce a charming effect. It is better to have all the decorations in one color, however elaborate the detail.

THE MENU

The menu is lighter and shorter than for a dinner and includes no roast. The usual sequence of dishes would be oysters or grapefruit, or some other hors d'œuvre, bouillon or clam or chicken broth, fish or lobster, an entrée, sorbet, game or chicken with salad, ices, coffee. These are, as a rule, served individually, except the coffee, which may be poured by the hostess.

The oysters or grapefruit are on the table when the guests enter the dining-room, the proper utensil, spoon or fork, upon the plate. Under the plate containing this course is a larger one, covered with a doily, which remains on the table between the courses and is removed only with the sorbet. The bouillon is served in its cup with a small round doily in its saucer. The fish should be cooked in some appetizing manner, and served in small dishes which have their own saucers. These need their small round doilies also. The entrée, a pâté, or sweetbread, or some delicate meat, is on a small plate, breakfast size; if it is a pâté, there is a paper doily beneath it. The sorbet or punch (which is only lemon ice with some sort of liqueur poured into it) is in small glass dishes which have their own saucers. This is the opportunity for the smallest and daintiest of doilies.

The game or broiled chicken is served with watercress or a white lettuce leaf on the plate for garnish, but the salad is on another plate, which is placed by the attendant to the left of the dinner plate. After the game course, the crumbs are removed and the finger-bowls are set in. These have frequently their own saucers and require their own doily. Under them is another doily protecting the dessert plate. The guest removes bowl and doily, setting it to the left. It is on this dessert plate that the plate with the ice is put. In serving,

the fresh plate with the food upon it is set down as the one just used is removed. When, as is sometimes the case, the hostess serves the ice cream, or the fruit macédoine which replaces it, the butler or waitress holds in the hand an extra plate which is put before the hostess as the other is removed to serve. In this case, it is the dessert plate which stands before the guest which is used.

A luncheon of twelve requires about three days' preparation when the food is cooked in the house. The menu must be given the cook and the orders to the grocer and butcher two days before. Bouillon and entrées must be prepared the day before, needing only the finishing touches to make them ready for the table. So also the fish, which is never cooked whole and served in portions, but dressed in some special way, as in timbale or à la Newburg. The waitress or butler should also have a copy of the menu. There should be written out with each course the condiments or relishes to be served with it; for instance:

Oysters
(red pepper, horseradish, oysterettes)
Bouillon
(celery, olives, saltines, etc.)

The table is set with a small roll beside the plate, lying on the napkin. The spoon for the bouillon (dessert size), knives and forks for fish, entrée and game are on the table, the spoons and knives lying to the right of the plate and the forks on the left. The spoon for the sorbet is small (coffee size) and lies in the saucer as the portion is served. The spoon and fork for the ices are on the plate each side of the finger-bowl. When the coffee is brought on the table to be poured or served in the drawing-room the cups and saucers are set out on the tray, each cup in its saucer, with the tiny spoon at its side. They may not be piled upon each other. Only sugar in square blocks or domino sugar is used for the coffee, unless the hostess have a fancy for the decorative qualities of sparkling rock candy.

When the coffee is brought into the drawing-room liqueur

sometimes accompanies it. In that case, on a separate tray, are the cordial glasses and also the shallow champagne glasses filled with crushed ice, as well as a choice of cordials. The butler inquires of each guest her preference as to cordial and the manner of serving it, whether plain or frappé.

Unless some special form of entertainment is provided for the afternoon the guests leave shortly after coffee is served.

THE SERVICE

The requisites for a successful luncheon are hot appetizing food and perfect serving. One person, if deft and quick, can serve six people provided she has proper seconding in the kitchen. For more than that number of guests the number of attendants must be increased proportionately.

The hostess who intends to entertain frequently should keep the service of china, glass, and napery which is used on such occasions entirely separate from that which is put on her table every day. After each dinner and luncheon, the glass and china should be looked over and, if possible, all breakages replaced at once. The tablecloth and napkins should be laundered at once and all doilies put in good order. When the service is the same as used every day there is no certainty that one will not find a shortage on the day of the entertainment. That intended for entertaining is not necessarily any better than that in common use. It is the convenience of the arrangement which is its recommendation.

THE FORMAL DINNER

A dinner is the most intimate entertainment of social life. The necessary limitation in the matter of numbers and the fact that at no other function do men and women have the opportunity to converse with each other without distractions, combine to make it the pleasantest form of social meeting. An invitation to dine is the greatest compliment which can be paid to a friend.

THE MENU

In the catering, a dinner differs from a luncheon in some particulars. There are more courses, and wine is usually served. The menus of to-day are, however, much lighter than they were formerly, and the time spent at the table much shorter. From two to two and a half hours is the limit of a modern dinner as against the four or more hours of eating which was customary some years ago. To compose a successful menu requires some gastronomic knowledge. It is not enough to choose a number of delicate viands, to follow each other; one must know how to order a well-balanced dinner or luncheon. Fortunately it is not necessary nowadays to work in the dark and learn only from experience. Owing to the missionary efforts of Miss Parloa, Mrs. Rorer, Miss Corson, and others on scientific lines, we are no longer a nation whose ideas of cooking are a laughing-stock to all foreign visitors. We have learned in a great measure, not only just what and just how, but just why. We have only to keep our eyes open, moreover, and make use of the advantages offered us in the current literature prepared for the home to be prepared always with the last new thing.

In choosing the menu, we should remember that some excellent forms of food do not belong to a dinner of many courses because they are too heavy. One does not serve even sucking pig at a dinner party. Also nothing should be put before a guest which can not be eaten with ease and grace. Corn on the cob is not a suitable formal dinner dish. It may be well to remind the beginner that cream soups are tabooed when one entertains male guests on account of the trouble they find in eating them when the mustache is long. All the courses which precede the roast are intended only to prepare for it, and those which succeed are only to supplement it. On one side come soup, fish of some kind, a light entrée; on the other follow game, salad, and some form of sweet dish. The soup may be preceded by oysters or other form of hors d'œuvre, and the sweet dish followed by a savory, or cheese and biscuit. With the roast come potato and the

appropriate vegetable. Soup is served in soup plates as a rule, though one sometimes sees the bouillon cup used on a dinner as well as a luncheon table.

As the courses have become fewer and lighter, so has the quantity of wine consumed at a dinner diminished. It is not often, nowadays, that a variety of wines is served. A good white wine and claret, or claret and champagne, is the usual combination. When the full quota is given, the sequence is as follows: Chablis with the oysters, sherry with the soup, sauterne with the fish, claret with the entrée and with the roast, champagne with the game and thereafter; or it may be that the claret is served with the entrée, followed by a burgundy served with the roast. No wine is poured after the cheese is on the table; but the water glasses are filled immediately after the sweet course. It is very bad form to take much wine at the table. A guest does not permit his glass to be filled often, and indulges sparingly in the whiskey and soda offered in the smoking-room. Coffee and liqueurs are served in the drawing-room and smoking-room after dinner. In the latter room the diners find cigars set out with bottles of White Rock and a decanter of Scotch whiskey.

THE TABLE

The table is covered with a damask cloth. A bare table is not good form for a dinner, according to the present decree of fashion. It is decorated as directed for luncheon, but in addition to the flowers and other ornaments there are candles with colored shades set on symmetrically. These "candles" are either real candles in the porcelain shells provided with a spring which forces the candle up to the top as it burns, or small kerosene lamps in candle form. The wax candle with the paper shade is a very dangerous thing on the dinner table or elsewhere.

THE SERVICE

When the soup is served in cups, the cups are filled in the butler's pantry. If plates are preferred, the hostess may have the tureen placed before her, or they may be brought from

the pantry already filled. Nothing else is served on the table except the ice cream or other sweet dish. This is usually prepared in a very ornamental style, and is, in fact, one of the table decorations. If helped in the pantry the effect is lost. The fish course is often of the kind which is served in the ramekins, but it may be some delicate fish like sole or pompano which is put on the plate in portions. The platter of fish, meat, or game is not offered to the guest at a dinner party, partly because of the length of time it takes to go down the length of the table, but also because of the awkwardness of the proceeding. When the party is small, the accompaniments may be offered to permit of the guest serving himself, such as cucumber with the fish and the salad with the game. Generally speaking, however, it is only such things as condiments, celery, olives, etc., which are passed. The hostess pours the coffee in the drawing-room and sends the cups filled into the smoking-room. It is not good form for the men to linger by themselves longer than the moderate smoking of one cigar would justify.

XXVIII

W E D D I N G S

Invitations—Wedding Presents—Groom and Best Man—Bride and Bridesmaids—The Church Wedding—The Home Wedding—The Reception
—Wedding Customs and Omens

INVITATIONS

THE invitations for a wedding are engraved in script or Old English, printed on double sheets of heavy lustreless white paper, which fold once to fit the envelope. This envelope is addressed with the full name of the person to whom it is to be sent, and slipped into another envelope of thinner paper, which is addressed in full, stamped and mailed. It is not an opportunity for small economies. Each person invited must have an invitation addressed to himself or herself. A single envelope directed to Mr. and Mrs. Herbert Norton and family is not in good taste. Of course one envelope only is used for husband and wife. When there are two or three members of one family to be invited the envelopes to the invitation proper can all be slipped into one of the thinner ones and that addressed to the mother of the family as its representative head.

[Script]

Mr. and Mrs. James Lyle Thorne

*request the honor of your presence
at the marriage of their daughter,*

Marion Eldridge,

to

Mr. Gerald Sidney Dalton,

*on Wednesday afternoon, June the ninth,
at three o'clock, in*

St. Thomas's Church,

Fifth Avenue and Fifty-third Street,

New York.

An invitation to the house would read:

[Script]

*Mr. and Mrs. James Lyle Thorne
request the pleasure of your company
at the marriage of their daughter,
Marion Eldridge,
to
Mr. Gerald Sidney Dalton,
on Wednesday afternoon the first of October,
at four o'clock.
Four, Riverside Place,
New York.*

If a reception at the house follows the ceremony at the church the card to this function is inclosed with the latter invitation. It differs in no particular from the form of the invitation to a reception previously given. With this is inclosed the "At Home" card of the young couple, without their names.

[Script]

*At Home
Tuesdays, after December the first,
Ten, Sanborn Circle,
New Orleans.*

When the number of people asked to the ceremony is small and the reception large, the invitations are to the reception:

"Mr. and Mrs. William Lyle Thorne request the pleasure of your company at the wedding reception," etc. In the same envelope is inclosed a card mentioning the hour of the ceremony to those privileged to view the marriage. This is usually half an hour before the time mentioned in the invitations.

If the wedding is very small and there is no reception, announcement cards are sent out after the marriage.

[Script]

Mr. and Mrs. William Lyle Thorne
announce the marriage of their daughter,
Marion Eldridge,
to
Mr. Gerald Sidney Dalton,
on Wednesday the fifteenth of June,
one thousand nine hundred and four,
New York.

The invitations are sent out in the name of the bride's parents, if both are living; in the name of the surviving parent should one be dead. If she is an orphan it is the brother who requests the pleasure. Failing either parents or brother, the invitation is sent out by an uncle and aunt, though it is perfectly proper headed by the names of the bride's sisters.

The list of persons invited to a large church wedding includes the servants of both families, those who have been prominent in the preparation of the trousseau, and all the business associates of the groom who are not on the reception list.

WEDDING PRESENTS

Wedding presents should be sent at once on the receipt of the invitation. To wait until the last minute is not only a

piece of cruelty to the bride, whose note of thanks must be written in that case when she should be resting, but it is a mistake in so much as the gift itself seems handsomer and more attractive in the early stages of the reception and arrangement of the presents than later, and prevents confusion and requires some bookkeeping. The gift should be entered at once with its description and the name of the giver for future reference. "The Book of the Bride," by a clever New York girl, is a handsome vellum-bound volume whose pages are ruled in columns, headed Giver, Date of Reception, Description, Name of Maker, When Acknowledged, etc. Each line is numbered. A package of small gummed labels comes with the book, the number corresponding to the line of entry being written on the label before it is affixed to the gift. All presents which come during the day before the wedding should be acknowledged at once by some member of the family or some intimate friend for the satisfaction of the giver. The note of thanks is then written by the bride at her convenience after her return from her wedding journey.

GROOM AND BEST MAN

The expense of a wedding is borne entirely by the parents of the bride. The groom provides the carriage which takes him and the best man to church, and the one in which he and his bride depart. He buys the ring and fees the clergyman. This fee is intrusted to the best man, who hands the sum to the clergyman in a neat little purse. The best man also takes charge of the ring on the day of the wedding and sees that his friend is at the church on time.

Groom and best man alike at a day wedding wear frock-coats and light trousers. The fashion of the moment decides whether the waistcoat is black like the coat or of white duck. There is also no last word possible as to the color of the tie and gloves.

BRIDE AND BRIDESMAIDS

The bride does not wear a low-cut dress, either at a church or a house wedding. If married in a traveling dress she wears

no veil. If the wedding is in a church with bridesmaids the veil is obligatory. It may be worn over the face or not as the bride decides. A widow does not wear a veil at her second marriage, nor can she have the bridesmaids or maid of honor. If married in a church she usually dresses in some light shade of gray with a handsome hat to match. The dress and hat may be of white if preferred.

THE CHURCH WEDDING

At a church wedding the pews of the middle aisle for some distance from the chancel or pulpit are reserved for the families and near friends of the bride and groom, by tying a white satin ribbon across or by an arch of flowers. When there is a chance of a crowded church a small card of entrance is inclosed with the invitation. Such a card would read, "Please present at the church." There is always a place for old family servants provided near the seats of the family of the bride.

The coming of the bridal procession is announced by the first strains of the wedding march. Immediately before this is played the mother of the bride is escorted up the aisle and takes her seat in the left-hand front pew.

The procession is headed by the ushers; then follow the bridesmaids; one maid or matron of honor enters alone, followed immediately by the bride on the arm of her father. The groom and the best man issue from the vestry a minute or two after the clergyman, and wait at the chancel until the bride has nearly reached the chancel steps. The clergyman advances with the groom and the best man. The groom descends the steps and meets the bride and her father. The latter lifts the hand of his daughter from his arm and lays it in the hand of the groom. He then steps aside and sits in the pew until the question is asked, "Who giveth this woman to be married to this man?" The father then rises and, standing slightly behind them, lays the hand of his daughter in that of the groom.

It is often the case that the marriage ceremony is divided

into that of the betrothal and the marriage. The first takes place at the chancel steps, the second at the altar rails.

The maid or matron relieves the bride of her bouquet, removes her glove or turns back the ripped finger, and at the close of the ceremony turns back the tulle veil. When the bridal pair go down the aisle the maid of honor follows them closely. She also stands near them as they receive congratulations.

THE HOME WEDDING

The guests at a home wedding are received by the family. Neither the bride nor groom is seen before they appear before the clergyman. They may enter together and advance toward the clergyman, who stands facing the company. Sometimes the bride enters on her father's arm, as at church, and meets the groom, who, with his best man, follows the clergyman and awaits her entrance. When the company is large, an aisle is made by means of white satin ribbons held by the ushers.

THE RECEPTION

A wedding reception does not differ from any other in details. It is by some held necessary to provide champagne in which to drink the health of the bride. By far the greater number of cultivated people, however, the use of wine at all large assemblages of people is discountenanced.

In the arrangement of a house for a wedding reception, a room must be set apart for the use of the groom and his ushers. Cigars, cigarettes, and a sufficient supply of sparkling water, Apollinaris, fresh from the ice, or White Rock are placed in the room, and the supply of the latter renewed from time to time. Scotch whiskey is sometimes furnished, but it is not only not obligatory but not approved by the best authorities on the etiquette of weddings.

WEDDING CUSTOMS AND OMENS

At a small and informal wedding the bride may cut her cake in which are hidden a thimble, a coin, a ring, and a

button. The thimble and the button promise celibacy, the coin riches, and the ring early matrimony to their recipients. The cake is not the fruit cake commonly known as wedding cake, but a white cake handsomely frosted. The fruit cake is cut in small slices and put in ornamental boxes decorated with the monogram of bride and groom. It is customary to place the pile of dainty boxes in charge of some intimate friend of the family, who sees that not only are all the members of the family remembered, but all the servants and helpers.

Only members of the two families, the wedding party, and very near friends wait for the departure of the bride. The bride as she descends the staircase in her traveling dress carries with her the bouquet, which she throws in the midst of those who stand below. A wedding within the year is the lucky omen to the one who catches it.

CONCLUSION

THE HOMEMAKER AND HER WORK

What the Homemaker Owes Herself—How the Homemaker Should Look at Life—
What We Owe to the Homemaker

WHAT THE HOMEMAKER OWES HERSELF

THUS far we have looked only on the duty of the homemaker toward her home and its inmates. That she has a certain duty to herself can not be denied. Yet when set forth and analyzed we may find, after all, that it is only another form of her duty to her environment.

The homemaker must not neglect herself either physically or mentally. She must maintain her position in the eyes of husband and children as the one and only and most superior of women. This permits no slackness in dress, manners, or mind. The books of advice to wives for all time have held forth on the duty of each woman to dress for her husband and the danger the sloven runs of losing his affection and respect, quite regardless of any reciprocal obligations on his part. Very few, however, have dwelt on the effect which carelessness in dress and manners has on the affection of the children, or on the pride and glory they feel in a mother always neatly and appropriately clad, whose company manners are her everyday wear. A child suffers untold, because inexpressible, miseries when forced to admit any comparisons between its mother and other women in any way unfavorable to the former. One little boy, after enduring such a situation in frowning silence for some time, at last planted himself before an extremely dressy and vivacious cousin who was calling, and observed with concentrated venom and the use of the worst epithet his vocabulary afforded: "You are a devil!" and then whispered to his horrified mother: "When I grow up I will buy you a black satin dress just like Cousin Sadie's."

When it is not the clothes, but the breeding, which the child calls into question, the helpless wretchedness of that child is even greater. It is the homemaker's highest self and most polished exterior which the child always and incessantly demands.

It is her best mental self also and an active expression thereof which she should give to the child. It is no small disappointment to find that the mother's care and interest does not compass the school and the lessons. The vanity of the child is not stirred when it finds it has entered a domain of knowledge closed to its mother, but its pride is injured. In America the child often does leave the parent behind, but the college-bred girl has only her own indifference to thank if she and her children are separated through their studies. It is not enough merely to bear children and attend to their health and morals. A mother must be the mother of the mind and accompany her charges along the path of learning if she means to fulfil her duty thoroughly.

And the homemaker must not allow herself to become overtired. Her health and freshness are more important to her household than many other things—especially material things. We have written to very little purpose if we have not made it plain that it is not the multiplicity of things which makes for happiness. The pride of possession may be too dearly bought by the care the possessions entail and the time which must be sacrificed to them.

At the first symptom of overcare, the homemaker should call a halt. When one realizes that feeling best described as "being the only man in the regiment in step," that is the time for a change of scene and air. "If I discover a tendency in myself to make George and the children all over from the beginning," said a very successful homemaker, "I always go away on a visit, and invariably find them much improved when I return."

And the homemaker must not permit herself to become housebound. She owes it to herself and to her family to have as wide interests in the community as is possible. Unless she

can gather in something from the outside world, she can have very little to give out. She must live a large, free life of the intellect and the emotions, or she can not afford the blessings of life to those around her.

HOW THE HOMEMAKER SHOULD LOOK AT LIFE

There are some things which should always be present in the mind of the homemaker, certain philosophies of life which should govern not only her actions, but her thoughts.

When the author of "Confessions of a Wife" makes a character say, "In marriage there are always appearing phases which we mistake for finalities," she uttered a truth which applies to all life as well as to the relation of one life to another. No moment is final. Each is the preparation for the next. This is an imperfect world only, as it is still in the process of evolution. The process is perfect, but we can view but that part of it which we see. So, rightly looked at, no moment with its burden stands alone. Whatever the burden may be, we must reserve judgment until we can see it from the perspective of distance or time.

And a very important thing! As is the tone of mind of the homemaker, so is the tone of mind of the whole family. She calls into existence the manner of thought in all who surround her, family and servants alike. Like mistress, like maid, is no idle form of words. It is what she looks for that she sees, and what those around her see. Moreover, many things acquire a false importance by being seen. They grow through attention. The health of the homemaker's point of view is the health of the family outlook.

And the way in which she does her work of homemaking sets the tone for the house. If she manages on the principle of force and determination, she may expect an equal resultant reaction of force and obstinacy. If she is content to study human nature and act on her knowledge, she will find much to be grateful for in her relations with her family and dependants. The average being may be led, but it is a very unusual nature which prefers to be driven.

It was once our fortune to be present at one of a series of lectures given by a Christian Science teacher in a Southern city. Perhaps nothing has astonished the outsider in the work of this sect so much as the way in which its enunciation of ethical principles, supposed to be practiced by the world at large for centuries, have been received as new and divine inspiration. Brotherly love and the golden rule have certainly not been recent discoveries. Yet to the appalled wonder of the outsider as voiced by this sect they have come as welcome but strange principles of action. On this occasion, before beginning the lecture, the teacher inquired if any of her hearers had put in practice during the week the lessons previously taught. One, a man of great powers, with whom, however, his acquaintances and neighbors found it extremely difficult to live at peace, replied in the affirmative.

"And which lesson?" was asked.

"To try to obtain satisfactory results through praise rather than by blame," was the answer.

"With whom?"

"The children and servants."

"And the result?"

"Most excellent. But when I think that I have lived forty-five years to learn it only now, I am humiliated."

It is possible that there are many who would be better for the same lesson at an even more advanced age.

It is the lesson of the homemaker at any age and at all times. Also the homemaker must not be narrow-minded, nor see too clearly the excellence of her own way.

There is nothing in this world for nations or individuals worth fighting for but principle. All victories bring with them a bitterness which only the consciousness of having striven for something beyond the mere gratification of a preference or a desire of power will make bearable. This is most true in our dealings with our families. Besides, what satisfaction is there in having one's own way when no one else is pleased with the result? What we wish is not so much the yielding of the point as a concession of the spirit. There is not an

occurrence of daily life worth a contention when the yielding is possible with due regard to the rights of others. And while the list of conflicts won by yielding is endless, too often the thing over which the discussion began is forgotten in the struggle of wills.

Then too, the homemaker should endeavor to look on the domestic life from a man's point of view. She is apt to ignore the fact that his conception of a home differs radically from hers. She is inclined to feel that he is inconsiderate in demanding too much return in the way of comfort for the money he allows her. He on his part gets fretted and impatient over small lacks in the household economy, forgetfulness on the part of mistress and maid. Most of all he resents a whining spirit in the former. A man detests returning to a tired wife. He feels that he works hard to keep her and the children in comfort, and comfort therefore he ought to have himself.

The trouble lies mostly in a lack of personal experience on each side of the manner and demands of the life work of the other. Every man is in a small way a Roman centurion. He says go, and the underling goeth. The domain of a woman, on the contrary, is ruled by tact. Duties may be perfectly divided and balanced between the different members of the household, but the unexpected calls and disturbances require not only a head for detail, but a way of planning work for one's subordinates and a way of communicating one's demands to them which will ensure perfect and cheerful compliance. The personal equation must be brought into play in house-keeping, when in business there are merely duties to be performed. If every woman in the country could have a slight experience in an office she would appreciate what it means for a man to come home to failures and incomplete house-keeping. Has there not been all day to have the things done? He on his side seems to have difficulty in realizing that the methods of a business and a house are totally different. In business there are certain duties and certain stipulated money rewards; failure to fulfil one results in the cessation of the other, and a newcomer in the place of the one who has

failed. There is an independence of consequences impossible to a housekeeper bound to provide three meals and a neat home to her family. Nor does the average man perceive that there is a difference in the atmosphere. Yet no man would be content to have the cool, unresponsive tone of his office reproduced in his house. There he demands warmth, affection, interest, and mutual reliance. That these are the results of unending concessions of the ego he is slow to learn. And he can be taught only by one who has mastered his point of view.

Finally, the homemaker must cultivate her sense of humor. That will be a very unusual domestic tragedy which has not its comic side. She must also preserve an impersonal attitude. Are there not a good many of us to whom a failure is a direct insult to our dignity? And is it not so, perhaps, because if we were honest with ourselves we would confess to a consciousness that we should have foreseen the event and provided against its occurrence? But in housekeeping and homemaking as well as in character, some one mistake, some one failure is valuable as a needed warning. It is not instant faultfinding, or condign punishment of the offender, which is required, but the recognition of the lesson taught. It is not the homemaker's dignity which is called in question, but her experience. When we withdraw the ego from domestic matters there is not dignity to be injured. When we see humor in the incongruity existing between our intentions and their results, there may be pathos, but the sting of defeat is missing. The homemaker who is in herself the home must yet hold herself so far aloof from it that she can govern it, not be so enmeshed in its various threads that she is hampered in her action.

WHAT WE OWE TO THE HOMEMAKER

What do we owe to the homemaker? Everything, we may say. Consideration for her, loyalty to her, our best assistance in her efforts, and the conscientious development of our best selves. It is through us that her life work is to be judged, and it is judged by many to whom she is unknown. We betray our home associations in a thousand ways, unknown

to ourselves. We were struck with this fact some years ago when visiting a summer home in New England. One day, when our hostess joined us after concluding a bargain with a farmer from a neighboring township who had driven over to dispose of his lambs, she observed suddenly, "How much we say when we are not conscious of giving the slightest information. That man has a very good wife, I am sure, and she is a fairly happy woman, too."

"But how can you tell?" we asked.

"From his looks and his manner. His linen is clean, for she takes pride in it. He keeps his hands clean, for he has a high standard of neatness. She is particular. He has not the habit of browbeating a woman, so I know she has character; nor of getting ahead of her, so I know she is not overbearing. He can listen to what one has to say. I am convinced that he hears very little that is unpleasant."

"But about her happiness?"

"He looks contented. No man with an unhappy wife ever looked like that."

And yet that man had simply sold his lambs, and had not said one word of himself.

Yet what the homemaker can do for us is limited by our way of responding to her efforts. Perversity, wilfulness will bring her best endeavors to naught; selfishness will hamper and hinder her. If we so live and act that she sees no value to her work, that work is curtailed. But it is we who lose thereby. The homemaker, under discouragement, may be able to look beyond the present with hope. She is used to work for future rewards, but we who hinder her have only the misery of the present which we make for ourselves. After all it is we who have the responsibility of the success of the home. It is for us to make it what it can be, if only in gratitude for the unceasing efforts which the homemaker puts forth in our behalf. We have the opportunity every minute of the day and every day of the year. Do we make the most of it?

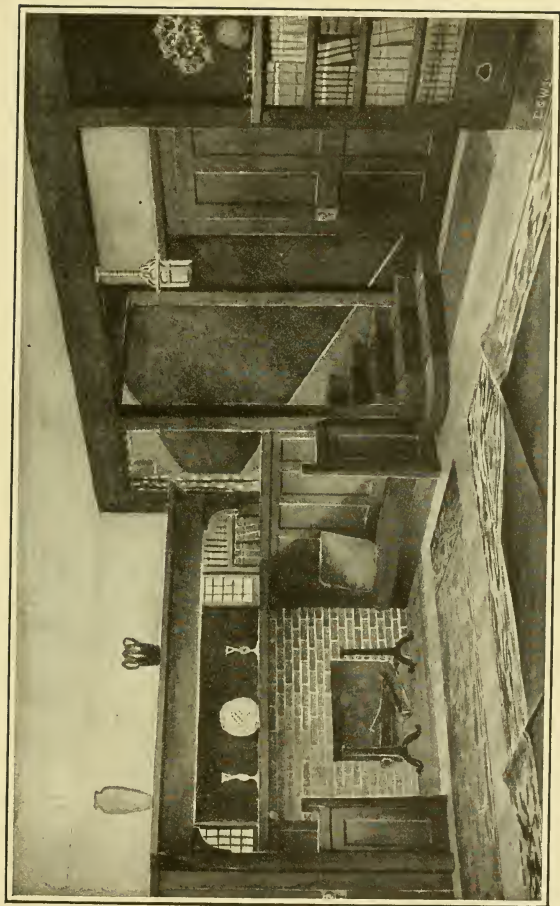


PLATE I.—A Hall in a Country House

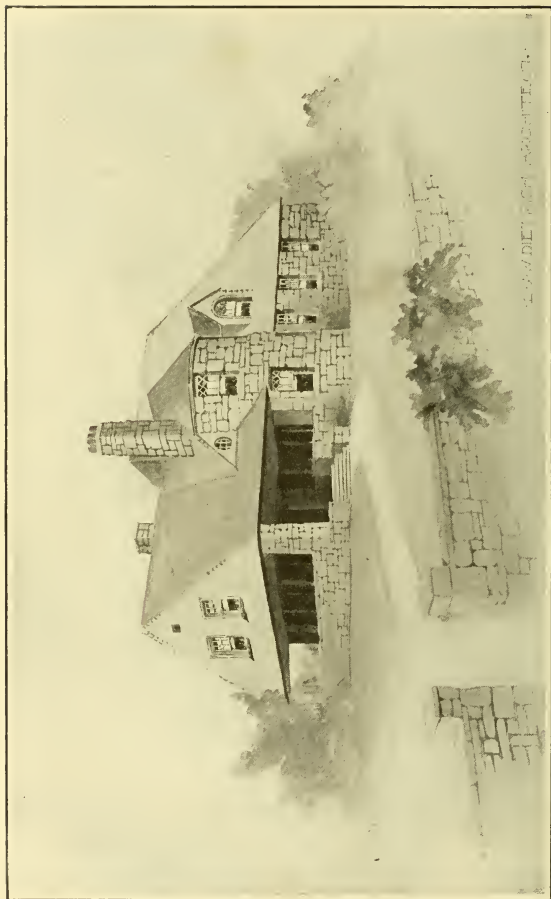


PLATE II.—A Stone Cottage

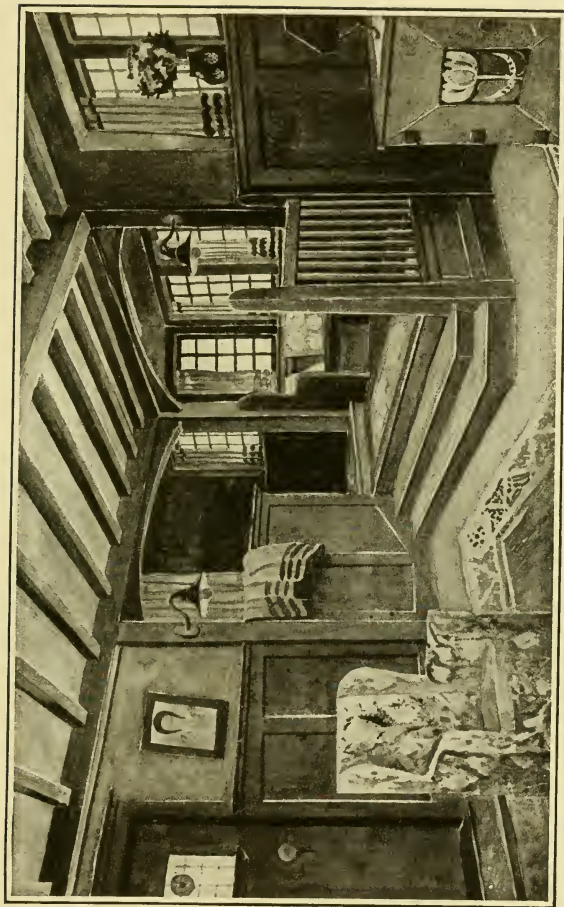


PLATE III.—Hall with Timbered Ceiling (in Stone Cottage)

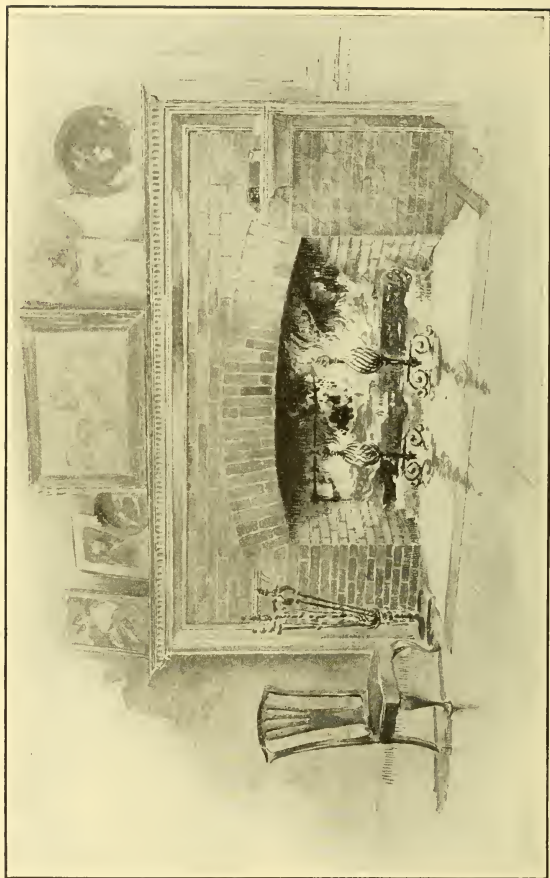


PLATE IV.—Fireplace in Colonial Style. Designed by Howard Greenley



PLATE V.—Rustic Fireplace for a Mountain Home

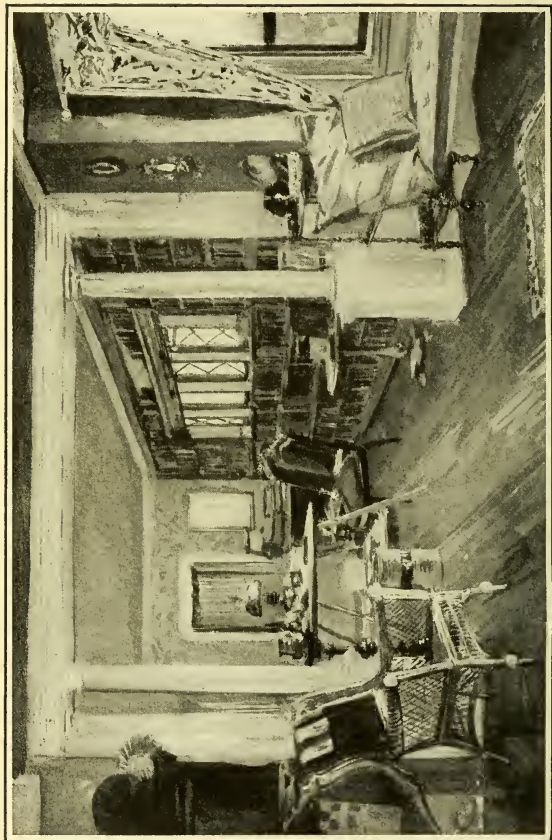


PLATE VI.—Special Fitment: Bookcase with Windows

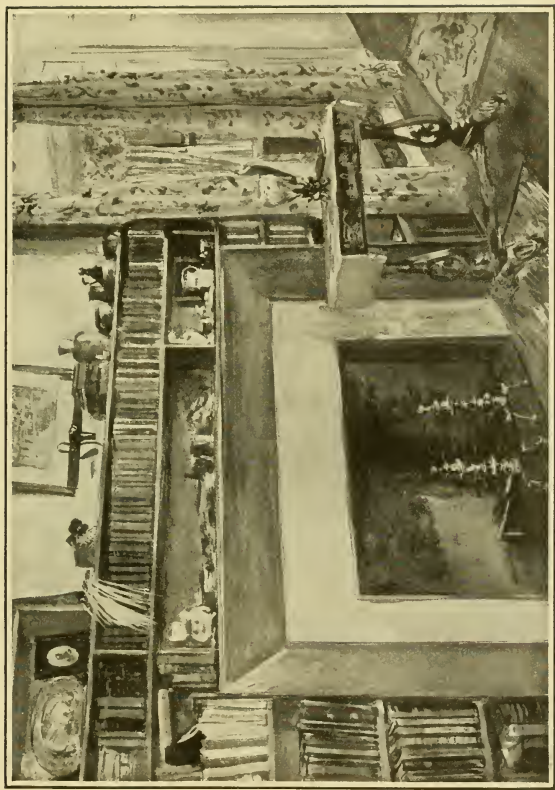


PLATE VII.—Special Fitment: Mantel and Bookshelves

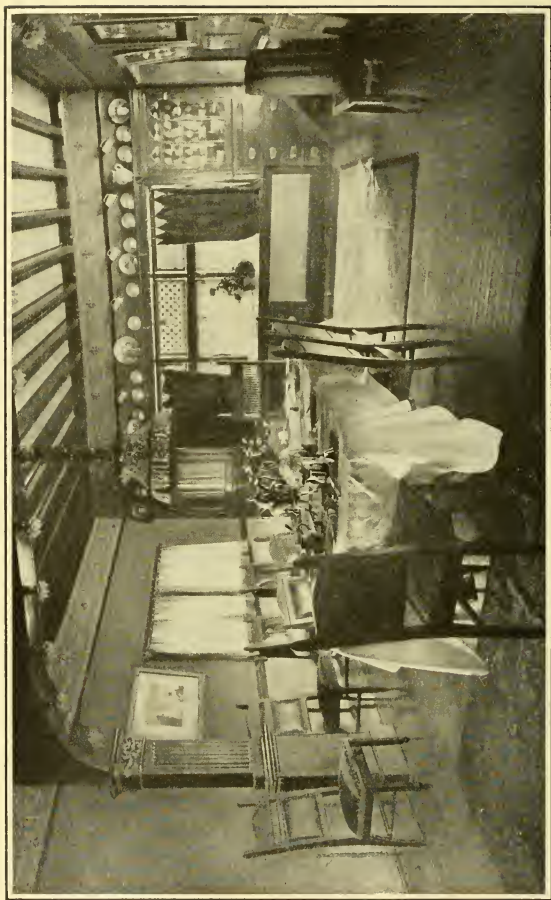


PLATE VIII.—Dining-Room in Colonial Style



PLATE IX

Chairs and Sofa. Period of Louis XIV



PLATE X

Chairs and Sofa. Period of Louis XV



PLATE XI

Chairs and Sofa. Period of Louis XVI



PLATE XII

Chairs and Sofa by Chippendale. Colonial Period



PLATE XIII

Chairs and Sofa by Sheraton. Colonial Period

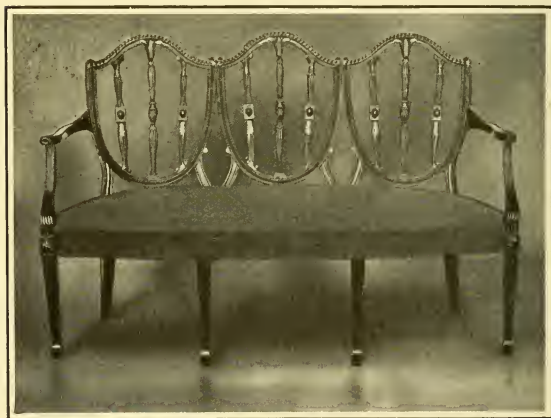


PLATE XIV

Chairs and Sofa by Johnson. Colonial Period



PLATE XV

Chairs and Sofa by Heppelwhite. Colonial Period

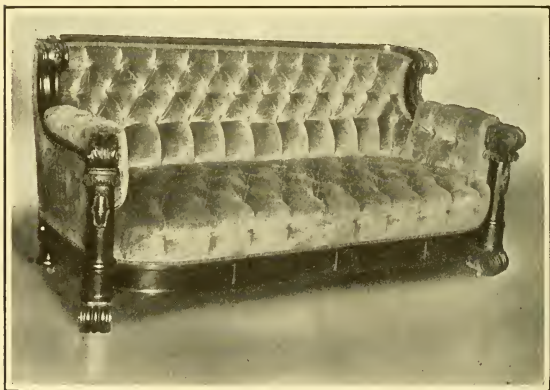


PLATE XVI

Georgian Chair and Davenport Sofa. Colonial Period



PLATE XVII

Mission Furniture: Table, Chairs, and Screen



PLATE XVIII

Mission Furniture: Dresser, Chair, and Settee

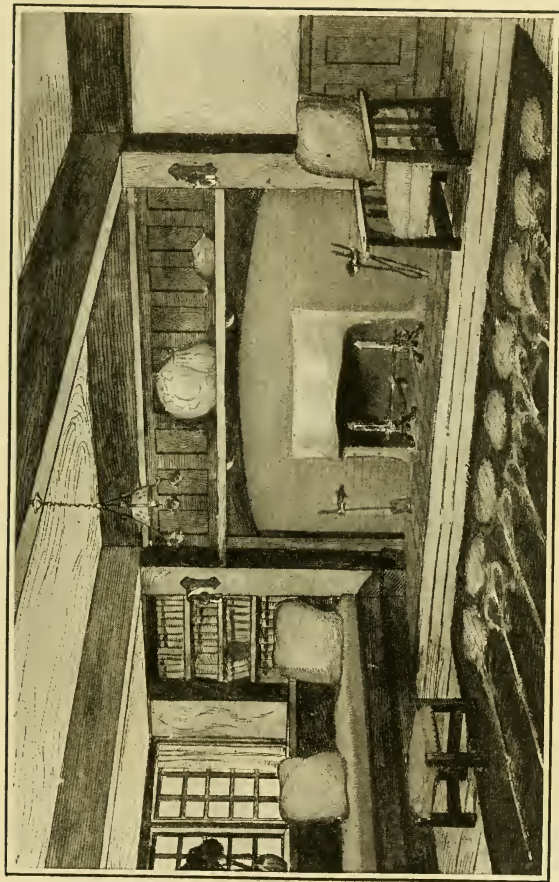


PLATE XIX.—The "Craftsman" House: Hall

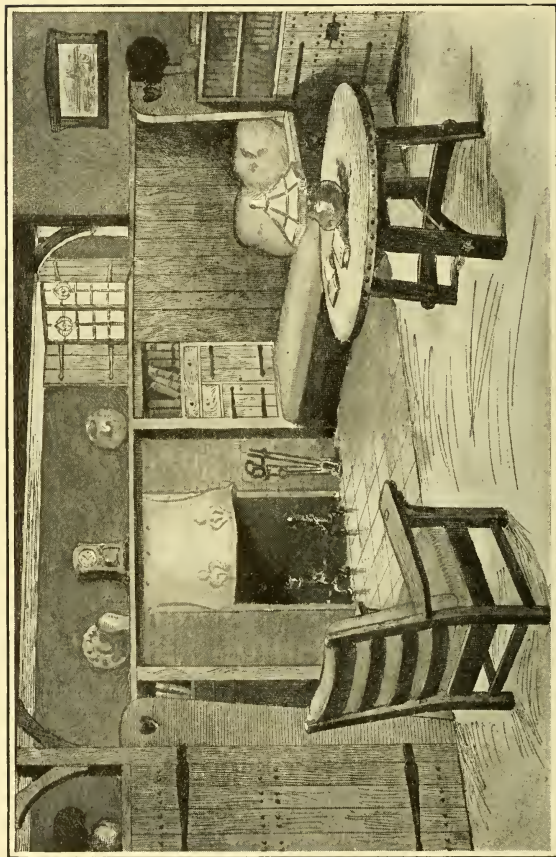


PLATE XX.—The "Craftsman" House: Library

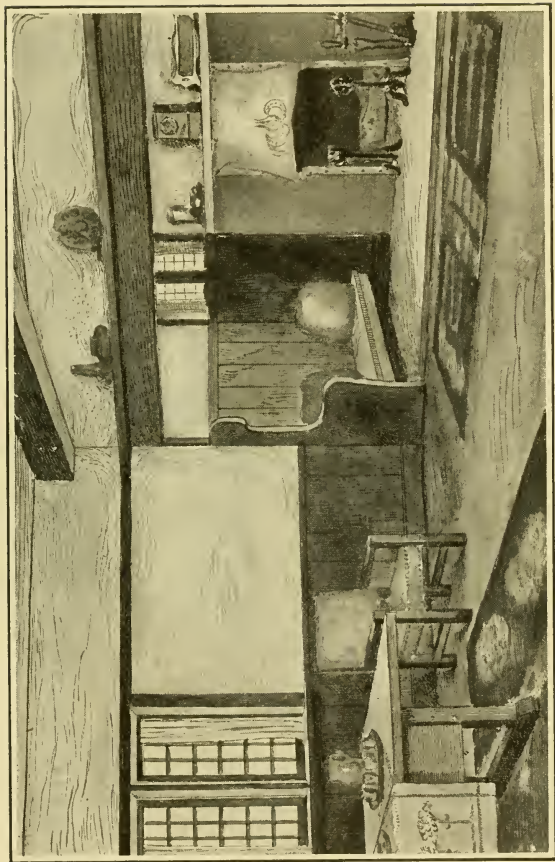


PLATE XXI.—The “Craftsman” House: Dining-Room

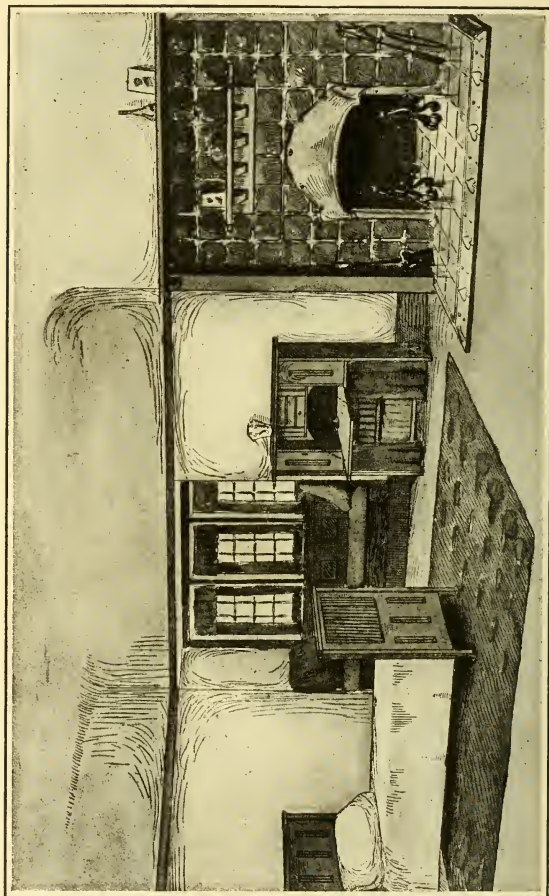


PLATE XXII.—The “Craftsman” House: Bedroom

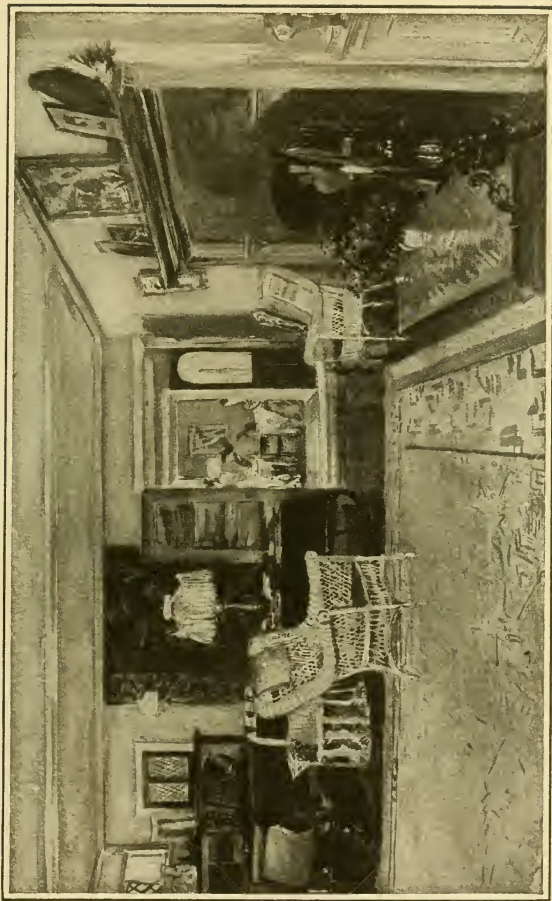


PLATE XXIII.—Keeping-Room in Colonial Style

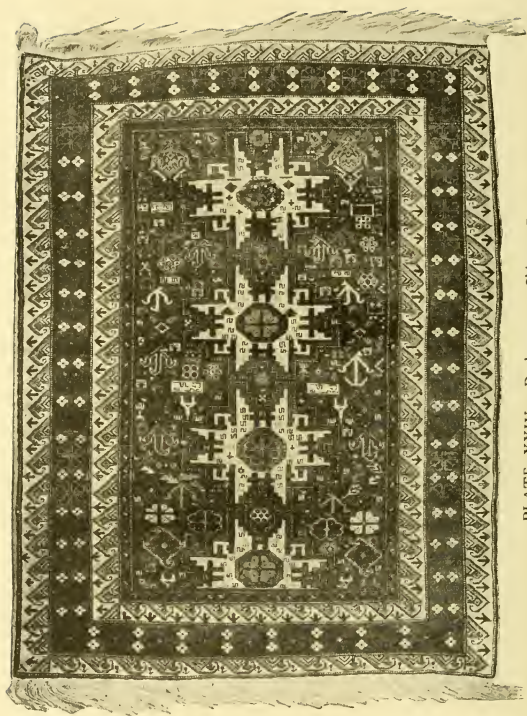


PLATE XXIV.—Daghestan or Shirvan Rug



PLATE XXV.—Daghestan or Shirvan Rug: Variety “Chi Chi”



PLATE XXVI.—Guendjis Rug



PLATE XXVII.—Kazak Rug



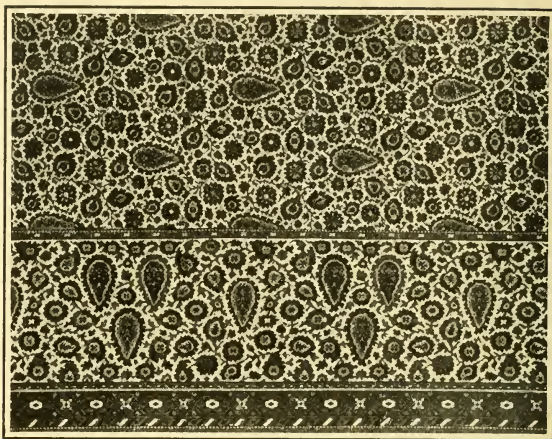
PLATE XXVIII. — Bokhara Rug



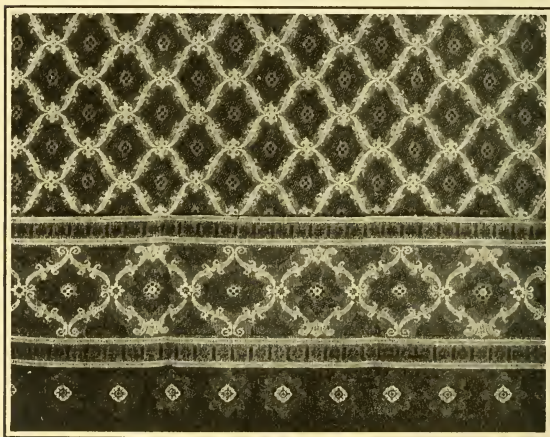
Bigelow Axminster Carpet. Louis XV Design



Bigelow Wilton Carpet. Oriental Pattern



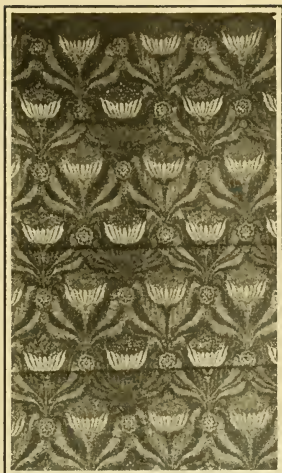
Bigelow Brussels. Persian Pattern



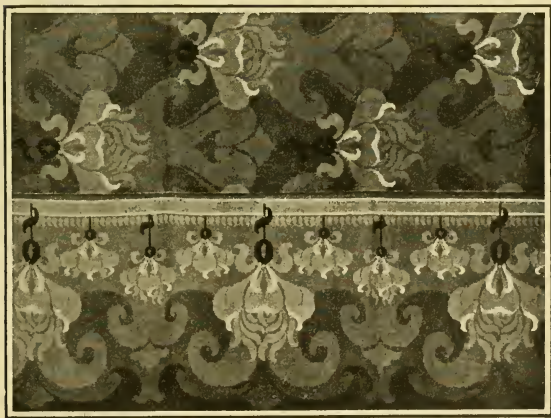
Bigelow Brussels. Conventional Pattern



Brussels Carpet. Adams Design



Three-Ply Carpet. Morris Design



Bigelow Wilton. The "New Art" Design



PLATE XXXII.—Class in Laundry. (Teachers' College, Columbia University)

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